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# Railway Age

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Vol. 104

April 23, 1938

No. 17

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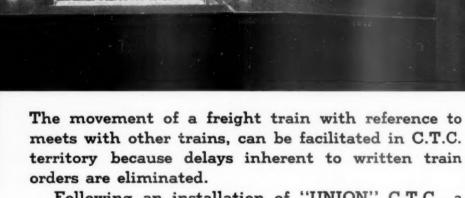
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#### **RAILWAY AGE**

# Government, Labor Leaders and the Railways

It is to be hoped that developments during the last two weeks do not conclusively indicate how much help—or hindrance—business in general, and the railroads in particular, can expect from the federal government in getting out of the "recession," which has become about as bad for business in general, and worse for the railroads, as the worst of the depression. There are some indications that the decline of production and freight traffic will stop about where they stopped in 1932. Unfortunately operating costs and taxes, especially of the railroads, are much higher than then.

In his message and radio address favoring resumption of pump priming on a huge scale, President Roosevelt repeatedly appealed for co-operation by business. We must assume that he meant co-operation in carrying out his policies. But unless the entire recorded economic experience of mankind means less than nothing, business cannot support the President's policies and at the same time promote recovery. Everybody who has really studied economic history and what it shows must infer from his message and address either that he is ignorant of that history or that he discusses economic problems entirely for political purposes. Numerous nations have in the past recovered from numerous depressions; but economic history does not disclose that any country ever accomplished recovery by the policies heretofore followed and still advocated by the Roosevelt administration.

#### Why Has National Income Increased?

The only economist of any reputation who ever advocated huge spending as a principal means of recovery is John Maynard Keynes, an Englishman. The British rejected his theory, tried orthodox methods and accomplished full recovery. The United States, under President Roosevelt's leadership, adopted Keynes' theory; has increased the national debt 20 billion dollars; never anywhere near accomplished recovery; and is now back deeper in the depression than in 1932.

The President credits to his policies the increase in our national income from 38 billion dollars in 1932 to 68 billion dollars in 1937. What, then, caused the large increases in national income that occurred before

we had his policies? Fourteen billion dollars of the increase in the five years from 1932 to 1937 was purely nominal, being due to advances in prices, and leaving about 16 billion due to increased production and government spending. But an increase of 16 billion occurred in the two years from 1927 to 1929 without any general advance in prices or large government spending. This shows that production and construction increased two and a half times as fast during the last two years before the depression as during the five years from 1932 to 1937. How do the New Dealers explain that? In every period of nine years following the beginning of every previous depression the national income became much larger than ever before. In 1938 it will be about 35 billion dollars smaller than in 1929. How do they explain that?

#### New Deal Policies-Who Has Been Right?

The President and other supporters of his policies claimed they would cause recovery and prevent such great fluctuations of business as had previously occurred. The opponents of these policies predicted they would involve enormous waste, greatly increase the national debt, hinder recovery and increase fluctuations of business. Who has been right? Every single statement of fact regarding the present business situation in the President's message and address was a condemnation of most of his policies and a vindication of those who have heretofore opposed them. Who, then, is more likely to be right in future regarding these same policies—those who continue to advocate them, or those who continue to oppose them?

It is plain that in its own and the public interest the only thing business can do is oppose continuance of the New Deal policies that have failed, including huge "pump-priming" government expenditures, and adopt to whatever extent it can in the management of its own affairs the policies that it believes will help increase the national income by increasing production, construction, employment and payrolls. A great increase in government expenditures will seem, as before, temporarily to improve business. As heretofore, however, it will actually hinder business in promoting real and

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lasting recovery; and the more the government spends the more resolution and courage business men will have to show in carrying out in their own industries the policies essential to real recovery.

#### "Co-Operation" With Railways Not in Evidence

The railroad problem has the present and prospective business situation and the President's announced policies as a background. For five years there have been differences of opinion among railroad leaders regarding what their attitude should be toward the Roosevelt administration and the railway labor leaders who have supported the administration's policies and had its backing. Some have believed that the railroads should seek the administration's favor by not opposing its general policies and by co-operating with railway labor leaders in carrying out its policy of advancing wages in industry in general and on the railroads in particular. They have expected that in return the government would help them get increases of gross earnings that would maintain or increase net earnings. It was largely for this reason that the 10 per cent deduction from basic wages was fully restored by railway managements in 1935; that retirement pensions were agreed to; and that finally advances of wages to the highest level in history were made last year.

All expectations of benefits for the railroads from cooperation by the administration and labor leaders have been disappointed. Full recovery of general business and freight traffic never occurred. They have declined little for some weeks; but the country is dependent for cessation of the "recession" and vigorous renewal of the recovery movement upon resistance by business to the avowed policies of government and labor. The advance in freight rates recently authorized by the Interstate Commerce Commission is wholly inadequate, on the basis of present traffic, to offset the increases in railway operating costs and taxes that have occurred under the New Deal. The movement for reduction of wages started by railway managements a few weeks ago was halted by a public statement of the President that he was opposed to it and by an intimation that he would recommend other measures for dealing with the railroad emergency. Later he sent to Congress a large amount of documentary material accompanied by a message making no recommendations, thus throwing the railroad problem into the lap of Congress without any assistance from him.

#### Labor Politics and the Railways

Following a subsequent conference with railway executives the labor leaders said, through George M. Harrison, president of the Railway Labor Executives' Association: "The carriers asked us to discuss a wage reduction and we replied: 'Hell, you're not going to get anything out of us.' We won't give them the whiskers from yesterday's shave." All labor leaders have to be essentially politicians to get and hold their

jobs. The railway labor leaders are playing a game of politics among themselves which is an important reason why railway management apparently can get no co-operation from them. There is a feud between Mr. Harrison and A. F. Whitney, president of the Brotherhood of Railroad Trainmen. For two or three years Whitney has been openly attacking Harrison for the crime of allegedly trying to help the railroads. By his maneuvering he recently forced Harrison into declaring in favor of the train limit bill, the passage of which would have been inimical to all railway employees excepting those in train service. On April 11 Whitney issued a statement attacking Harrison for going to the White House with railway executives and presenting to President Roosevelt a plan for government subsidization of the railways. "Whose interests does a labor chieftain protect when he carries water on both shoulders?" said Whitney. "I assert that the first obligation of a railway labor executive is not to administer the railroad industry, but rather to guard and to further the interests of the workers whose trust he holds. Collective bargaining becomes a myth when railway labor is trapped into the position of thinking for, and therefore with, railway management." The statement by Harrison above quoted indicates Whitney's political attacks on him have convinced Harrison that if he is to retain his position of leadership he must become as "tough" in his attitude toward the railways as Whitney.

#### Self-Help Only Solution for Railways

The inconsistency between what both Harrison and Whitney said to railway executives about "co-operation" when the wage negotiations were occurring last year, and the attitude expressed by both of them now, indicate that those who took their assurances at face value then are in danger of being decorated with some large and handsome double crosses.

Failure of help from both government and labor leaders will leave railway management where it will have to rely entirely on its own efforts. With working conditions unimproved, wages higher than ever and business almost as bad as at its worst, it apparently will be necessary for management to resort to the slow processes of the Railway Labor Act to get a substantial reduction in labor costs. For the long pull the situation which has developed may have its advantages. Any reduction of wages to which the labor leaders agreed would be temporary. A reduction secured under the Railway Labor Act might be kept in effect until improved business justified advances.

Contrary to a widely held belief, there is a way in which the railways can get a reduction of wages in spite of all opposition while complying strictly with every provision of the Railway Labor Act. They are required to give employees formal notice of a proposed reduction and to bargain collectively with their representatives. If collective bargaining and intervention by the government's mediation board fail, either the rail-

ways or the employees may decline to arbitrate. The President may then appoint an "Emergency Board" to hear both sides and make a report and recommendations as to how, in its opinion, the dispute should be settled. But an "Emergency Board's" recommendations are not binding on either side. If the railways did not like them they could wait thirty days and then put the proposed reduction of wages into effect.

#### **Examples Set by Labor Unions**

In doing so they would be following examples already set by some of the railway labor unions. For example, in 1922 the shop crafts unions refused to accept an award for a reduction in wages made by the Railroad Labor Board and declared a nation-wide strike. The means by which an agreement with the labor leaders for a temporary wage reduction would have to be secured would not afford opportunity for much needed public ventilation of the entire existing situation with regard to working rules and wages. Procedure under the Railway Labor Act would afford this opportunity.

The managements of the railways, like the managements of all other kinds of business, must decide to what extent they will in future allow their policies to be dictated by persons outside of business who assume no responsibility for results—who claim credit when the results are apparently good, but blame business management when they are bad. To the policies of government and labor leaders are mainly due the large increases of railway expenses and taxes, unaccompanied by a corresponding increase of traffic, that have occurred during the last five years, and the consequent decline of railway net operating income to a new low level; but government and labor leaders assume no responsibility for these results. The railways tried to

get the Interstate Commerce Commission to authorize a sufficient advance in rates to cover the increases in expenses and taxes; but the Commission refused to assume the responsibility.

#### Managements' Responsibility to Security-Owners

Those who have invested in railway securities have as much right to reasonable returns as employees have to reasonable wages or the public to reasonable rates.

Railway managements have responsibilities to employees and the public; but they also have a special and even greater responsibility to railway security-owners, and especially stockholders. They have the responsibility to security-owners and the public of getting the net earnings without which security-owners cannot get a return on their investment and the railways cannot do the buying from industry essential to enabling them to maintain and improve their service to the public.

The developments that have occurred apparently have devolved upon railway managements the responsibility of taking all the steps necessary to establish the relationship that should exist, under present economic conditions, between gross earnings and operating costs. There is nothing in the Railway Labor Act that can, in the long run, prevent them from putting into effect a reduction of wages. The struggle necessary to do so might complete the industry's bankruptcy and precipitate government ownership. But continuance of the present relationship between gross earnings and operating expenses much longer would complete the industry's ruin and compel government ownership, anyway. The railways had just as well be ruined in a struggle caused by efforts of their managements to save them as to be ruined by continued operation of the causes that are ruining them now.

#### Industrial Traffic Managers Hold Key to Railroads' Future

TO THE EDITOR:

Railroads have stated that they need,-

(1) Higher freight rates;

(2) Lower wage scales;

(3) Equality in competition with other transportation agencies;

(4) Modification of requirements for government loans to railroads; and

(5) A change in the bankruptcy law to bring about speedier reorganizations.

There is at least another angle to the question. Traffic managers, far and large, have chiseled rates and are continuing to ask for reductions.

Under the theory of rate making in this country, low class commodities are charged lower rates and high class commodities higher rates; this being based on the theory that higher class commodities could stand higher rates, and it has worked out fairly well.

With the advent of the trucks, they have taken the cream of the business at slightly lower than railroad rates. This has been a serious handicap and has led to reduction in freight rates on down the line.

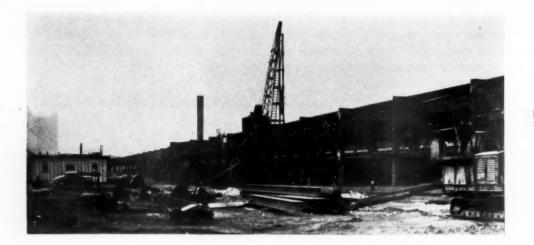
Again since the last rate increase, which was inadequate,

various industries are asking for reductions, with the threat that they will truck their business if not granted.

The big business men of this country, as represented by the motor industry, the steel industry, the rubber industry, the manufacturers' association, the association of canned goods manufacturers, United States Chamber of Commerce, and others, should be appealed to and asked to do their part to save the railroad industry. The entire blame cannot be placed on either the government or the railroads themselves. The time has come when they must realize that some business statesmanship is in order. They must realize that railroads are an essential industry and must be made to pay their way. It is to their interest that railroads continue to operate under private management rather than have them operated by the government. Some general instructions to industrial traffic managers regarding this phase of individual company policy would be in order.

It is thought that the A. A. R. organization is the logical point of contact with all of these organizations to bring this about, and is an activity which is essential for

OPERATING VICE-PRESIDENT.



Showing a Portion of the Viaduct
—Material Yard in the Foreground

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# Sewer Construction Affects Tracks on Three Levels

Requires the driving of 1,200 steel piles 90 ft. or more in length to safeguard railroad viaduct at Detroit

FIVE-LEVEL crossing embracing a three-track railroad viaduct, several tracks at ground level, a double 5-ft. sewer, a large intercepting sewer and a double-track railroad tunnel, was one of the complications imposed in underpinning a viaduct at Detroit, Mich. However, the most formidable feature of the project was the driving of 1,200 steel piles to depths of 90 to 100 ft., all of which were spliced at least once by arc-welding

For a distance of more than 2,200 ft., this viaduct occupies West Jefferson avenue and the underpinning was required when an intercepting sewer, of 19 ft. outside diameter at this point, was being driven through soft ground under the center of the street by tunneling, the top of the sewer being from 16 to 20 ft. below street level

This viaduct is the property of the Fort Street Union Depot Company, and carries the three-track approach high and consists of steel deck girder spans about 35 ft. long that frame into cross girders that are supported on columns at each end. These bents have a transverse span of about 40 ft. so that the columns could be located on or close to the street lines. However, in the vicinity of Eleventh street, the presence of seven tracks of the Michigan Central, which cross West Jefferson avenue at various skew angles, made it necessary to depart from the normal location of the columns and place

to the Fort Street passenger station and other terminal

facilities. The terminal company is owned jointly by the Pere Marquette, the Pennsylvania and the Wabash,

This structure, which was built in 1891, is 25 ft.

which roads use the Fort Street station.

several of them near the center of the street. The structure is stiffened laterally by knee-bracing the columns to the cross girders, and longitudinally by introducing tower bracing at intervals. The columns are supported on concrete pedestals, most of which were on natural foundations. A few of the pedestals rested on piles with a penetration of about 16 ft.

The foundation material is blue clay extending to a depth of some 90 ft., where a stratum of hardpan overlies bed rock at a depth of 100 ft. or more below the surface. Although the foundations for the viaduct proved entirely adequate for a period of nearly a half century, the likelihood of serious displacements in the clay as the result of the tunnelling operations was so great as to indicate the necessity of extending the viaduct foundations to the hardpan.



Arc-Welding Comprised an Important Feature of the Project

#### Adopt Steel Piles

Because of the great depth of the supporting stratum it was concluded that the driving of steel piles offered the most practical and economical solution and the 14-in. 89-lb. section was adopted. The plan, in brief, was

as follows: Four or more piles were driven in a symmetrical arrangement around each old pedestal to serve as a temporary support for the column. The old pedestal was then removed to make room for the driving of from 2 to 10 additional piles and the construction of a new concrete pedestal of such dimensions as to embrace all the piles, including those driven to serve as temporary supports for the column. The column was then brought to bearing on the new pedestal and the portions of the temporary support piles that projected above the pedestal footing were burned off.

The piles used as temporary supports were loaded to a maximum of 120,000 lb. each, under the actual dead and live loading imposed, and the number of piles under each pedestal (including the temporary support piles) was determined on the criterion of a maximum concentration of 120,000 lb. per pile on the basis of a live

load of E 70.

Most of the piles were driven by a track driver working on the deck of the viaduct but all piles located clear of the north side of the viaduct were driven by a crawler-mounted crane with leads supported by a tall boom, as there was ample space along the north side of the viaduct for the operation of this crane. However, this crane could not be used along the south side of the viaduct because most of the abutting property was occupied by a freight forwarding house, tracks and other structures. In addition 77 piles in locations that could not be reached by either of these drivers were driven by a light rig with leads short enough to permit it to operate on the ground under the viaduct. This driver also completed much of the driving of piles driven from the viaduct deck to reduce the necessity for using a long follower.

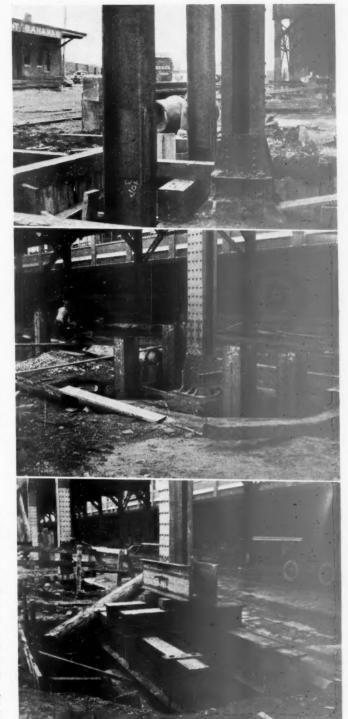
#### Forwarding Houses Vacated

Under ordinary circumstances West Jefferson avenue in this vicinity is used intensively by trucks moving to and from the forwarding house or backed up against tail board space extending along the entire street frontage of the building. Because this trucking operation would have interfered seriously with construction work, and vice versa, temporary quarters for the forwarding house were found elsewhere so that it could be abandoned during the duration of the project. This arrangement also permitted the temporary abandonment of several of the Michigan Central tracks that cross the street at grade just beyond the west end of the building. As is explained later, this greatly facilitated the solution of a difficult problem.

solution of a difficult problem.

As the piles were delivered in maximum lengths of 55 ft., it was necessary to butt-splice every pile at least once, but the 77 piles that had to be driven from beneath the viaduct were necessarily made up of much shorter lengths. Thus, splicing of the piles, which was done by welding, comprised an important element of the work. The splices involved the use of six steel straps two feet long, namely, one against the outside of each flange and one on each side of the web. With two feet of shear weld along the two edges of each strap, each splice required 24 ft. of welding. In addition, the welders were required to introduce weld metal between the ends of the abutting sections that were out of square and did not make good contacts.

The splice bars were welded to the lower ends of pile sections in a storage yard located along a portion of the north side of the viaduct, while the welding of these bars to the upper end of the lower section was done when the splice was in a position that permitted this work to be done readily at ground level. Each com-



Three Stages in the Underpinning of a Viaduct Column

plete splice required an average of one hour of welders' time. One welder was assigned to each driver and a fourth welder made the "first half" of the splices in the yard, in addition to other welding required.

#### **Temporary Support**

The temporary support for the viaduct columns was made by welding a piece of 12-in. 25-lb, channel 7 in. long to each side of the web of the piles at the top to serve as a bearing for 24-in, wide-flange beams that spanned across the tops of the pedestals on opposite sides of the column. By means of shorter beams and steel slabs, the 24-in, beams received the column loads

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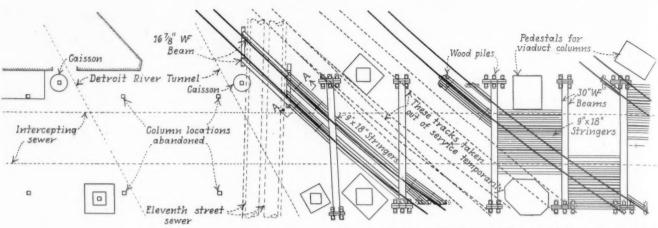
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16 8" W 305 # Beam 9 x 18" Stringers Ties 8x8" 12 × 14 Steel piles Typical 6 Pile Cluster Section A-A

Plan and Section of the Falsework for the Michigan Central Tracks
—Showing, Also, How the Work Was Affected by the Proximity of the Detroit River Tunnel

from 18-in. channels bolted and pinned to the faces of the column. The bearing channels were attached to the steel piles by a total of 40 in. of 3/8-in. bead welding in shear, thus requiring a unit stress of 3,000 lb. per inch of weld to develop the allowable load of 120,000 lb. per pile.

An unusual expedient in the construction of these temporary supports was the use of manganese structural steel for the distributing beams, because higher allowable unit stresses permitted a reduction in the size of the beams required and because of the greater bearing value of the metal for bolt and pin holes.

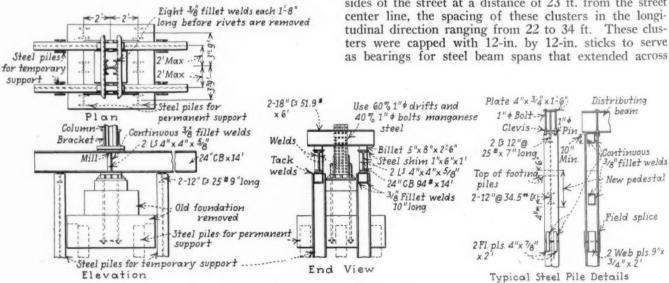
Distribution of the column concentration from the pedestal concrete to the columns was effected by welding short pieces of 12-in. 34.5 lb. ship channels (with the flanges horizontal) to both sides of the webs of the columns at an elevation that brought the lower flanges about 4 in. above the bottoms of the pedestal footings.

Some deviations from the procedure outlined above were involved in the vicinity of Eleventh street where the seven Michigan Central tracks cross West Jefferson street on curves that intersect the axis of the street on rather pronounced skews. As these tracks were in existence when the viaduct was built, it was necessary to adopt an irregular location of the columns so that they would clear these tracks, some of these columns being placed at or near the center of the street. As some of these columns were located directly over or close to the location of the intercepting sewer, it was necessary to move them to locations where the pile foundations would clear the sewer location by an adequate distance.

Because the freight forwarding house, which was served by some of these tracks, was taken out of service, it was possible to dispense with the use of four of these tracks for the duration of the work, thereby reducing interference with construction operations. Since only three tracks were retained in service, considerable saving was effected in the provision made for the support of these tracks where they crossed the location of the intercepting sewer.

#### Description of Falsework

This support consisted of falsework that was buried in the street to avoid any substantial change in the elevation of the tracks. Pile clusters composed of four to six 45-ft. wood piles each, were driven along the two sides of the street at a distance of 23 ft. from the street



Typical Details of the Underpinning

the street, the span between each pair of clusters consisting of two 36-in. wide-flange beams spaced far enough apart to permit the use of short sections of 30-in. wide-

flange beams between them as diaphragms.

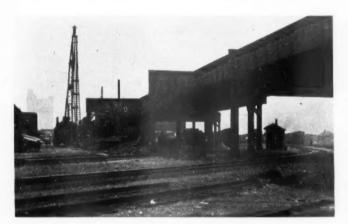
These beam spans served, in turn, as supports for 9-in. by 18-in. wood stringers spanning lengthwise of the street or, in a few cases, parallel with the track. These stringers rested on 8-in. by 8-in. by 3/4-in. shelf angles bolted to the webs of the beam spans at such elevations that the tops of the ties were 1/2 in. higher than the tops of the beams.

One exception to the construction described above was the use in one span of 27-in. wide flange beams for the track stringers, two per rail. Another variation was the use of 40-ft. steel piles in a bent on each side of a sewer in Eleventh street that crosses over the inter-

cepting sewer.

#### A Five Level Crossing

Formidable as were the difficulties presented in supporting tracks at two levels above the sewer tunneling operation, still another complication was introduced at Eleventh street by the presence of two tracks below the



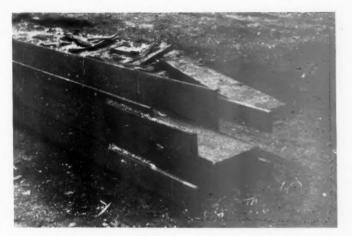
Where the Michigan Central Tracks Cross Under the Viaduct

intercepting sewer, namely, those in the Michigan Central's Detroit River tunnel. Thus, it was necessary to avoid interference between and insure the integrity of engineering works at five different levels, namely, the steel viaduct, the surface tracks, the Eleventh Street sewer, the intercepting sewer and the railroad tunnel, the top of which clears the bottom of the intercepting sewer by only 22 in.

To guard against excessive concentration of load on the railroad tunnel, sufficient steel reinforcement was introduced into the sewer for a distance of 100 ft. each way from the axis of the tunnel to enable the sewer to function as a beam in distributing its weight and the superimposed load. However, the presence of the tunnel introduced a much more difficult problem in its

relation to the viaduct foundations.

As seen on the plan, four of the old pedestals were located directly over or very close to the tunnel section, and had to be moved with their superimposed columns to locations that cleared the tunnel by a sufficient margin to permit the foundations to be carried to hardpan. As will also be observed, the presence of a surface track and the Eleventh Street sewers at one corner and a building and platform at another left little space for any sort of foundation,—too little, in fact, to permit the use of a steel pile foundation of the type used elsewhere on the work. As a result viaduct columns in new locations on this side of the street were supported on six-foot cyl-



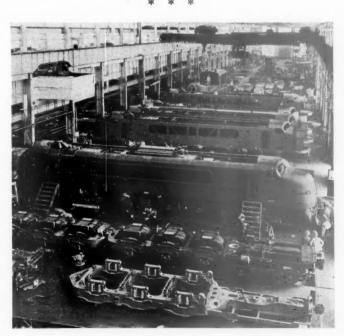
The Splice Plates Were Welded to the Lower Ends of the Pile Sections Before They Were Set in Place

indrical concrete piers built inside steel shells. These shells were sunk by the Powell process which involves the use of a large earth auger to excavate the material inside the shell.

The project was financed partly by the federal Public Works Administration. The sewer is being constructed by the Department of Public Works of Detroit under the direction of L. G. Lenhardt, commissioner, L. V. Garrity being engineer in charge. The new foundations for the viaduct were designed under the direction of C. S. Sheldon, engineer of bridges and structures of the Pere Marquette, Detroit, while L. E. Seas, now deceased, was retained to represent the railroad as resident engineer. The portions of the project involving the Michigan Central were developed under the supervision of J. E. Bebb, bridge engineer of this road.

The section of the intercepting sewer involving the complications described above is being built by the George R. Cooke Company, Detroit, the viaduct underpinning and the falsework for the Michigan Central tracks being done under a sub-contract by the W. J. Storen Company, Detroit. The two concrete caissons were constructed by

the Caisson Contracting Company.



New Electric Motive Power for the New Haven near Completion at the General Electric Company Plant at Erie, Pa.

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## Outlook for Wage Cut and Legislation

WASHINGTON, D. C.

HE April 15 action of railway labor leaders in flatly rejecting management's voluntary wage deduction proposal has been followed by a suspension of pay-cut maneuvers, pending the outcome of the April 21 conferences with Chairman Wheeler of the Senate committee on interstate commerce. After that conference, which was called to discuss prospects for emergency railway legislation and at which wages were not to be considered, the Association of American Railroads is expected to call a meeting of member roads to vote upon the question of proceeding under the longdrawn-out provisions of the Railway Labor Act.

The opposition to the voluntary-deduction plan, which was employed in 1932, was voiced by George M. Harrison, chairman of the Railway Labor Executives' Association as he left the April 15 conference at which the idea was advanced by the management group. Wage cuts, according to Mr. Harrison, "are out of the question;" and he added that "We won't even give them the whiskers from yesterday's shave." The R. L. E. A. chairman never in his life "heard of such a silly thing . . . as the attempt to reduce purchasing power at the same time as the President is pouring out \$4,500,000,000 in an attempt to increase buying power."

#### Will Proceed Under Labor Act

Meanwhile it is understood that railway management regarded this April 15 meeting as the one which would determine the course of future wage-cut moves. with labor's rejection of the proposal to negotiate a voluntary deduction, the next step will be the member road meeting preliminary to launching the Labor-Act proceeding. The detailed legal procedure would, if allowed to run its course, delay a final adjudication of the wage issue for several months; although there is always the possibility of a settlement at some point short of the full route.

Senator Wheeler called his April 21 conference with the management and labor representatives for the purpose of discussing President Roosevelt's railroad message and the accompanying recommendations of the President's railroad committee, composed of Interstate Commerce Commission Chairman Splawn and Commissioners Eastman and Mahaffie. It was Mr. Wheeler's idea that there might be enacted at the present session such of the Splawn-Eastman-Mahaffie recommendations as would not arouse controversy. On the House side Chairman Lea of the committee on interstate and foreign commerce plans to call that committee together next week to consider the recommendations.

#### Legislative Outlook

As pointed out in last week's issue the President's railroad message made no recommendation beyond suggesting that "some immediate legislation is, I believe, necessary at this session in order to prevent serious financial and operating difficulties between now and the convening of the next Congress." Also, in his April 14 message recommending huge federal expenditures to break the business recession the President listed "a serious undertaking to solve the railroad problem" among the needs "we must be definitely aware of."

With adjournment talk still in the air it is not ex-

pected that any major or controversial railway legislation could be enacted before the close of the present On that basis the Splawn-Eastman-Mahaffie recommendations with the best chances for immediate enactment are those dealing with liberalizing requirements for Reconstruction Finance Corporation Loans; the \$300,000,000 equipment loan fund and the elimination of land-grant rates. Also, the railroads are, of course, hoping for passage of the Pettengill bill to repeal the long-and-short-haul clause of the Interstate Commerce Act's fourth section. Without the latter the elimination of land-grant rates might cause losses of government traffic to Western railroads. It has been pointed out that the land-grant rates are low enough to keep transcontinental government traffic on the railroads. whereas much of it might be diverted to the water carriers if standard rates, without fourth-section relief, applied. Senator Wheeler on April 20 introduced "on request" a bill which would require the government to

pay full rates on its shipments.

While, as stated above, there is more or less general belief that the equipment-loan plan is likely to be included in any railway legislation passed, Chairman Lea of the House committee on interstate and foreign commerce has expressed the view that it would be difficult to get much popular support for the idea. Meanwhile there is some talk on Capitol hill of creating a joint congressional committee to study the long-term proposals of the Splawn-Eastman-Mahaffie committee and the railroad problem generally for the purpose of preparing a report and recommendations for consideration at the next session of Congress. In this connection the President's message spoke of Congress making "studies for permanent solution of the railroad prob-Jem." Representative Bulwinkle of North Carolina has introduced a resolution to appoint a select House committee to investigate the question of co-ordinating various government agencies dealing with transporta-The President brought this situation to the attention of Congress when he listed seven federal departments or agencies now dealing with transportation matters, and went on to suggest that "it would seem to be the part of common sense to place all executive functions relating to all transportation in one federal department. . . . At the same time all quasi-judicial and quasilegislative matters relating to all transportation could properly be placed under an independent commissiona reorganized Interstate Commerce Commission."

The single railroad corporation idea was given further publicity during the latter part of last week when Interstate Commerce Commissioner Miller made public a letter and reports which he had submitted to Chairman Wheeler of the Senate committee on interstate commerce. Mr. Miller's letter revealed that some time prior to the original White House railway conference he had submitted to the President a memorandum entitled "A Suggested Plan for the Solution of the Railroad Probwhich was prepared by Mr. Miller in collaboration with Commissioner Caskie. Mr. Miller went on to say that his concurrence with the Splawn-Eastman-Mahaffie recommendations was qualified "in that I advocated the matter of consolidation be given primary consideration by the Federal Transportation Authority. The Miller-Caskie memorandum was submitted to Senator Wheeler and Chairman Lea of the House committee on interstate and foreign commerce at the request of the President.

Meanwhile officers of the Association of American railroads continue to deny that the carriers are planning an early return to the Interstate Commerce Com-

(Continued on page 738)

# Atlantic Coast Line Buys Fifteen Passenger Cars

Coaches built by Bethlehem are air conditioned and have spacious lounge rooms—The seats have reclining backs

ELIVERIES are being made to the Atlantic Coast Line of 15 passenger coaches from the Harlan plant of the Bethlehem Steel Company at Wilmington, Del. These coaches, which are for service between New York and Florida, are air conditioned and have seats for 66 passengers. Each is provided with ample lounging facilities both for men and women. The cars are carried on six-wheel trucks and weigh 156,500 lb. each, ready for service. They are 83 ft. 6½ in. in length over the buffers, 74 ft. 4½ in. over the end posts, and 9 ft. 10½ in. wide outside.

The seats are of the divided type, with the backs separately adjustable in three positions, and have spongerubber cushions and backs of spring construction, upholstered in mohair. In seven of the cars the color scheme of the interior decorations is predominantly of soft browns with green upholstery, the coloring of which is repeated on the inside facing of the Pantasote window curtains. The ceilings are in oyster white. The moldings are clay red, and salmon tan is used on the frieze panels and parcel racks. The pier panels are suede and the side walls below the window sills clay. The window sills are black Micarta. The floors are done in an alternating checkerboard pattern of Algerian black and surf green Linotile with a black border.

In eight of the cars the prevailing color scheme is blue gray with the upholstery material and inside faces of the window shades in blue and with contrasting colors of pink and brown used in the frieze panels and parcel racks. The checkerboard pattern of the Linotile floors of these cars is black and red.

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aee of Since the coaches will be used in overnight as well as in daylight service, extra large lounges and washrooms are provided, one in each end of the car. The lounges are fitted with built-in end sofas for three persons and have two tubular-frame chairs. Both seats and chairs are comfortably cushioned. In the men's room the upholstery is brown Pantasote. In the women's lounge the sofa and chairs are upholstered to harmonize with the general color scheme of the coach. Adjacent to each lounge is a commodious washroom entered from the lounge through an open archway. These washrooms are fitted with porcelain wash basins and dental lavatories, the former served with both hot and cold water. In the corner of the ladies' wash room is a dressing



Interior of One of the Atlantic Coast Line Coaches



One of 15 Coaches Built for the Atlantic Coast Line by the Bethlehem Steel Company

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The Men's Lounge, Seen from the Washroom

table and chair with corner mirrors. In the door to the toilet is a full-length mirror.

Beyond each washroom is the toilet in a separate compartment, space for which is gained by dispensing with one vestibule door at each end of the car. Thus, each car has two vestibule doors at diagonally opposite corners rather than the customary four. When the cars are coupled in service passengers may enter or leave through the door of the adjoining coach if the door which would otherwise be nearest to them in the coach they are occupying happens to be on the wrong side.

The cars are built with oval roofs and the ceilings are flat, except for curved drop ceilings at the side walls. The lighting is from prismatic fixtures mounted on either side of the center of the ceiling, one over each double seat. Above the ceiling, on the center line of the car, is the air-distribution duct. Below the ceiling is a trough, through openings in the sides of which the air is delivered into the car body.

With the exception of the inside finish, the cars are constructed throughout of high-tensile Mayari-R steel,



Looking Toward the Toilet from the Men's Lounge

including such parts as center sills, web plates, cover plates, side-sill angles, side plates, side posts, and all exterior sheathing. The General Steel Castings sixwheel trucks are of the horizontal equalizer type, fitted with Bethlehem wrought-steel wheels. The distribution of the 156,500 lb. total weight is 81,600 lb. at the men's end and 74,900 lb. at the women's end, the difference being due largely to the seven-ton steam-ejector type air-conditioning unit located at the men's end of the car. The cars have double windows, with metal sash, which can be raised and lowered.

# Freight Claim Payments Increase

REIGHT claim payments of Class I railroads in 1937 amounted to \$24,381,819 compared with \$20, 920,487 in 1936, an increase of \$3,461,332 or 16.5 per cent, according to figures compiled by the Freight Claim division of the Association of American Railroads. During 1937 payments due to flood, fire and marine loss or damage increased 235.1 per cent compared with 1936, or to a total of \$377,204. Other causes for increased payments during the year were concealed loss, the payments for which increased from \$60,510 in 1936 to \$90,070 in 1937, or 48.8 per cent; concealed damage, the payments for which increased from \$2,307,775 in 1936 to \$3,265,528 in 1937, or 41.5 per cent; error of employees, the payments for which increased from \$219,879 in 1936 to \$304,905 in 1937, or 38.7 per cent; and unlocated damage, which increased from \$10,837,589 in 1936 to \$12,732,744 in 1937, or 17.2 per cent.

Of the 16 causes for loss and damage, 12 increased the payments in 1937 compared with 1936, while payments due to four causes were less than in 1936. The latter included freezing, or heater failure, the payments for which decreased 31.2 per cent; theft of entire package, the payments for which decreased 16.8 per cent; theft other than entire package, the payments for which decreased 28.7 per cent; and improper refrigeration or ventilation, the payments for which decreased 14.6 per cent. As a result, an increase of \$3,957,965 due to the 12 causes was reduced to an increase of \$3,461,332 by the \$496,633 decrease in payments attributable to the four causes.

In 1937 a number of commodities were handled with less damage, as indicated in the claims paid. Payments on melons decreased 2.6 per cent; on fresh vegetables, 12.3 per cent; on fresh and cured meats, packing house products and dressed poultry, 14.9 per cent; on coal and coke, 17.9 per cent; on petroleum oils, 1.4 per cent; on vegetable oils 11.8 per cent; and on manufactured tobacco products 11 per cent. Other commodities, though, suffered greater loss and damage in 1937. Payments on cotton increased 65.9 per cent; on machinery and boilers, 55 per cent; on brick, artificial stone and building tile, 55.1 per cent; and on ale, wine, beer, alcoholic liquors and mineral water, 55.3 per cent.

Payments for loss and damage to fresh fruits, melons and vegetables totaled \$5,588,307, of which \$730,898, or 13.1 per cent was paid on lettuce; \$397,676, or 7.1 per cent on watermelons; \$426,652, or 7.6 per cent on oranges; and \$364,142, or 6.5 per cent on grapes. A total of \$3,338,382, or 59.6 per cent of the payments on fresh fruits, melons and vegetables was due to unlocated damage to freight in packages.

During the year 2,260,729 claims were paid, as compared with 1,944,812 in 1936.

# Two-Cent Fare Best for East

So says Interstate Commerce Commission in 6 to 5 decision denying application for increase to 2.5 cents per mile

WASHINGTON, D. C.

■HE Interstate Commerce Commission's 6 to 5 decision denying the petition of Eastern railroads for authority to increase basic coach fares from 2 cents per mile to 2.5 cents was based upon the majority's conviction that the 5 to 4 decision of February 28, 1936, ordering the reduction from 3.6 cents per mile to 2 cents, still comprises "the best solution thus far devised for the passenger difficulties of the Eastern railroads insofar as their coach service is concerned." Anticipating the "interference - with - managerial - discretion" charge, the report answers that the Interstate Commerce Act was passed by Congress "for the specific purpose of interfering with managerial discretion insofar as might be necessary to insure compliance with that law;" and, after a conscientious consideration of the record, "the conclusion is irresistible that the proposed fare would be hurtful both to the railroads and to the public, and therefore would be in clear violation of section 1 and in contravention of section 15a(2).

The Eastern railroads had estimated that the 2.5 cents fare would produce \$29,961,000 in additional annual revenue on the basis of 1936, and while it was admitted that some business might be lost it was nevertheless the opinion of most of the applicant roads that "the net result would be an increase in passenger revenue, although not as great as the maximum amount

above indicated."

#### How Commission Divided

Chairman Splawn and Commissioners Meyer, Aitchison, Porter, Caskie and Lee comprised the majority which subscribed to the "Report of the Commission." Separate dissenting opinions were filed by Commissioners Eastman, McManamy and Mahaffie, while the dissents of Commissioners Miller and Rogers were merely noted. Despite Mr. Eastman's own judgment that the increase would be "more likely to harm than to benefit the Eastern railroads," and despite the seeming folly of gambling on the change of a set-up which has caused "a great drift back to travel by railroad," the former co-ordinator was not prepared to say that "there is enough evidence before us to remove this matter from the realm of managerial judgment to the realm of fact." Thus he felt that the Eastern roads were "entitled to take the risk if that is what they want to do."

Commissioner McManamy is of the opinion that the majority decision "stands alone in its utter disregard for the weight of the evidence, the established principles of law, the needs of the industry and the welfare of the country." Commissioner Mahaffie asserts that the decision continues "the tradition of penuriousness" which was so recently honored when the commission refused to allow "adequate increases" in the freight-rate phase of Ex Parte 123. And, he adds, the present decision aptly illustrates the ever-present danger that "regulators, without financial responsibility for results, may be tempted to substitute their own judgment as to the problems of management for that of the actual managers."

In the latter connection Mr. Mahaffie had previously said that the majority disallowed the increases "on the ground, in substance, that we understand the business better than do those conducting it." He went on, however, to discuss free transportation, which, he said, the carriers can restrict "if they care to do so." Some brief mention of this situation was also made in the majority report wherein it is pointed out that "if the carriers keep within the law, their actions are immune from condemnation by us."

#### Coach Deficit Eliminated

In making its above-mentioned finding that the 2-cent fare has been "the best solution" of the coach problem in the East, the majority sets forth data which it interprets as showing that "the 2-cent coach fare has resulted, apparently for the first time in many years, in eliminating or in coming close to eliminating any deficit from that service." Meanwhile, with Pullman service "being operated at a substantial deficit," the "chief passenger-car difficulties" of the Eastern roads now reside in such service "for which a solution remains to be found." At another point is some discussion of de luxe coach service such as is afforded on trains like the New York Central's Mercury. In this connection the majority, without any specific finding on the point, sees no reason why passengers receiving such coach services "should not pay a higher rate than is charged for standard coach service."

The report is a comparatively short one as major decisions go—19 mimeographed sheets, including 13 pages for the majority opinion and 6 pages for the three dissents. It points out at the outset that views of a cooperating committee representing regulatory commissions in Eastern states "coincide with those expressed herein," and goes on to review briefly the 5 to 4 decision of February 28, 1936, which brought the Eastern fares down from 3.6 cents per mile to the 2-cent level. In that case Commissioners Meyer and Lee, here with the majority, were among the four dissenters, the other two being Commissioners McManamy and Mahaffie. Commissioners Eastman and Tate did not participate, the latter because of illness and Mr. Eastman because the decision came during his term as co-ordinator when it was not his practice to vote with the commission except

in case of a tie.

#### Results of the 1936 Cut

The 2-cent rate became effective in Eastern territory on June 1, 1936, and in the subsequent seven months until the end of that year "the revenue passengers carried by the Eastern roads increased to 154,926,807 or 27.6 per cent over 1934, and the passenger revenue to \$203,507,946 or 16.2 per cent over 1934." In the first eight months of 1937 "the increase over the same period in 1936 was 15.3 per cent in revenue passengers car-

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ried, 20.6 per cent in revenue passenger-miles, and 7.2 per cent in passenger revenue." Attention is called to other data showing that "while in the Eastern district the first quarter of 1936 showed an increase over the corresponding period of 1935 of 13.9 per cent in passenger-miles and 10.6 per cent in passenger revenue, in the third quarter of 1936, the first full quarter of the fare reduction, those percentages increased to 42.3 in passenger-miles and 20.5 in revenue; also, that when the business recession commenced early in 1937 the effect upon ton-miles and freight revenue was much greater than upon passenger-miles and passenger revenue, so that in the third quarter of 1937 there was a deficit in freight revenue under the same period in 1936 of 0.5 per cent, whereas the passenger revenue continued to increase by 7.7 per cent. . . . In December, 1937, the latest month of record, the total operating revenues declined below the same month in 1936 by 28.2 per cent in freight revenue and only 0.1 per cent in passenger revenue."

The majority does concede that some of the improvement in passenger results was due to continued improvements in service and equipment, but it nevertheless holds that "much of it must be ascribed to the reduced fares." More statistics of passenger operations are analyzed as the report leads up to an examination of the contention that the present one-cent spread between coach and Pullman fares should be narrowed. In this connection additional data show that the reduced fares have brought increases in Pullman and coach travel, and the report goes on to consider whether the greater gain in the latter "is an undesirable result from the standpoint of the applicants, as most of them seem to contend."

#### Car-Mile Revenue and Costs

Car-mile revenue and cost figures are cited to make the point that "the car-mile revenue from coaches, including one-half the combination passenger car-miles, for the year ended June 30, 1937, was 35.5 cents, whereas the car-mile expense assigned and apportioned to coach traffic for 1936 was 34.66 cents. passenger train-miles and coach-miles in the year ended June 30, 1937, were somewhat greater than in 1936 it is not believed that the added expense was sufficient to overcome the difference between the coach revenue and expense of slightly less than one cent per coachmile. From sleeping and parlor cars the car-mile revenue for the year ended June 30, 1937, was 26 cents. and from all reserved cars, including parlor, sleeping, club, lounge, dining and observation cars, 21.2 cents, compared with an average car-mile expense for all reserved cars in 1936 of 29.56 cents." Even considering post-1936 increases in costs, the majority thinks that the foregoing figures "while approximations, point strongly to the conclusion that whatever the exact passenger-car deficit may be today, it is chargeable largely to the Pullman and not to the coach service.'

Criticism of the formula used in segregating freight and passenger expense is dismissed with the observation that while the formula "is capable of improvement with experience, it appears to be the best . . . that has thus far been evolved." The report then goes on to attribute the better showing of the coach business "to the greater increase in average car occupancy." Under such circumstances, it adds, "it would seem to be of doubtful wisdom, from a revenue standpoint, to now experiment further by disturbing the only basic fare of the applicants which holds promise of returning a profit and in which there is the greatest opportunity

for profit in the future, instead of experimenting with the Pullman fare and service, if, as most of the applicants seem to believe, further experimentation in passenger fares is desirable."

There follows the reminder that the present spread between basic coach and Pullman fares "can be narrowed just as readily and perhaps with greater profit to the applicants by a reduction in the first-class basic fare, or by a reduced first-class round-trip fare such as is in effect in the South and in the West, as by an increase in the coach fare." Also, it is pointed out that "the spread between the average fare per mile in Pullmans and in coaches which is being paid today is substantially less than it was prior to the fare reduction;" and cost studies cited in the 1936 fare-cut decision indicated that "the difference in the cost of operating the coach and the Pullman service is greater than one cent per passenger-mile."

#### Only Two Opposition Witnesses

Taking up the opposition testimony, the report calls John A. Hastings, of New York, an advocate of "postalized" fares, "a witness who for the last 15 years has been a close student of the railroad passenger service." It went on to say, however, that the record would not justify any finding on the "postalized-fare" idea. The only other opposition witness was J. G. Daly, representing the United Commercial Travelers, who predicted that if fares were increased, large numbers of business men "would again leave the rails and use other forms of transportation or materially reduce their travel itin-Later on the majority addresses itself to the contention that the appearance of only two opposition witnesses leaves the weight of evidence in the railroad presentation. "We have not been in the habit of deciding cases on the basis of the number of witnesses appearing before us, but upon the entire record," it says; and goes on to explain that "the traveling public is not organized like the railroads-it is not necessary for large numbers of the public to appear and tell us that they would prefer to pay the lower instead of the higher

#### First Results of Southern Hike

Meanwhile the report had found it "significant, although of course not conclusive, that in the third quarter of 1937 the increase in the passenger revenue over the same period in 1936 was 7.3 per cent in the Southern district and 8.1 per cent in the Western district; in October, 1937, those respective percentages were 5 and 7 and in November, 5.2 and 7.2; a difference in each period of not more than two points; but in December, 1937, the first full month after the Southern coach fare had been increased from 1.5 to 2 cents, while the Western carriers still showed an increase over that month of 1936 of 6.5 per cent, the Southern carriers suffered a decline of 2.8 per cent, or a difference of 9.3 points."

Next comes an expression of the majority's conviction that "the future travel market in this country is as promising as it has been at any time in the past, and that the railroads can aid in stimulating that market and share reasonably therein only at relatively low fares, particularly for application in their standard coaches." After further observations on the relative "profitableness" of coach business, the report goes on to say: "What can be done to make the passenger service of the railroads profitable as a whole is, of course, a matter primarily for the applicants," who "should at once give consideration to such further steps as may be neces-

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The report's closing paragraphs deal with the defense of the interference with managerial discretion, the comment on free transportation and the suggestion that additional charges might be assessed for de luxe coach services of the Mercury type.

#### Increase Justified by Higher Costs

Commissioner Eastman thought that the commission should have regard for the principle which it set down in its latest annual report as follows: "Public regulation is necessarily an interference with management, but it is not management, and it is no part of our duty to interfere with management in the fixing of rates when the question is only one of what is wise or unwise in the exercise of sound business judgment." When the fare reduction was ordered, Mr. Eastman went on, the question "had ceased to be a mere matter of judgment," because the Western and Southern roads had already profited materially from voluntary reductions. 1937, however, there have been large increases in rail-road costs, from which standpoint "there is plainly nothing unreasonable about the fares proposed." Thus Mr. Eastman views that the carriers were entitled to take the risk on the only remaining question—whether the higher rates would "as a practical matter produce more revenue."

Commissioner McManamy dissented for two reasons: "First, the supporting evidence is so meagre that . . the decision comes clearly within the well-established rule repeatedly laid down by the Supreme Court that a decision of the commission not supported by the evidence is void, and, second, because it is in direct conflict with principles established and adhered to by this commission for more than a quarter of a century." He goes on to develop those points and says that many decisions supporting such principles "have been directed to the attention of the majority and have been disregarded.' McManamy also refers to improvements in passenger services, which "have largely been discontinued because of diminished revenues resulting in part from our refusal to permit them to charge what the service is reasonably worth." He has no panacea for "the so-called railroad problem," but he does think that the commission's responsibility is to administer the act—"and what is here proposed has not been shown to be unlawful." Commissioner Mahaffie dissented "for much the same reasons" cited in his dissent to the 1936 fare-cut decision. He points out that "the officials of the carriers, who knows the situation better than we possibly can, say their revenues will be increased if the coach fare is raised to 2.5 cents," whereas the majority thinks such a boost would "most likely result in a loss of revenue." After further observations, as noted above, he goes on to say: "Either the railroads must be given an opportunity to support themselves by the charges they make for freight and passenger service, or they must be supported by the taxpayers, as such. The country still requires railroad service. Up to this time the taxpayers have not assumed the obligation to provide it. Perhaps they may later do so. If they do, it probably will be a much heavier burden than it would be if paid by the shippers and passengers in proportion as they utilize railroad facilities."

Mr. Mahaffie closes with his observations on the free transportation furnished by railroads, which, he says brings losses that "to an extent at least are voluntary." However, even if the cost of free service were taken into consideration (which the majority did not do) he is convinced that the proposed 2.5 cents fare "would not be in excess of lawful rates."

# Electric Locomotive Changed to Diesel Electric

HE locomotive shown in the accompanying illustration is believed to be the first instance of the conversion of an electric locomotive to a Dieselelectric. The rebuilding of this unit was done by the Cummins Diesel Engine Corporation of New York for the American Rolling Mill Company. The original equipment was a 60-ton General Electric trolley-operated locomotive designed for interurban service on the lines of the Toledo & Western in Michigan. In the process of rebuilding, the original unit was stripped down to the underframe leaving only the cab above. The original hoods enclosing the electrical equipment were entirely discarded. The underframe, trucks and brake equipment were retained and completely overhauled. The trolleys with which the locomotive was originally equipped were removed, in this case, because the purchaser did not desire full electric operation. Conversions of this type



This Locomotive Was Originally Trolley Operated—The End Hoods Now House the Two 250-Hp. Diesel Power Plants

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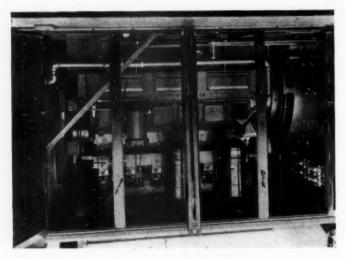
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Engine Hood Doors Removed to Show One of the Main Power Plants

can, however, be arranged for two-power operation—either trolley or third rail.

As finally rebuilt the Diesel-electric locomotive has an overall length of 37 ft.  $9\frac{1}{2}$  in.; an overall width of 9 ft.  $7\frac{1}{8}$  in. and a maximum height of 13 ft. 3 in. Each four-wheel, equalized truck has a rigid wheelbase of 7 ft. 2 in. and the truck centers are 18 ft. 3 in. The wheels are rolled steel, 36 in. diameter. The lightweight is

143,400 lb.; weight with fuel, sand and water, 146,000 lb. The power plant consists of two Cummins Model L six-cylinder Diesel engines having cylinders of 7-in. bore by 10-in. stroke. The piston displacement is 2,309 cu. in. Each engine is rated at 250 hp. at 1,000 r.p.m. At full load fuel consumption is .44 lb. per brake hp. hr.

The General Electric generators are direct connected to the engines and are mounted on the same base. They are designed for a maximum of 400 hp. engine output so that this locomotive has an electrical transmission capacity of 800 hp. for a 500-hp. engine output. The main generators are self excited with a battery-excited teaser field. The four traction motors, part of the original equipment, are the forced ventilated type. The 16-cell Exide batteries have a rating of 90 amperes for eight hours. In addition to the current drawn from the batteries for building up voltage in the main generator field, current is also drawn for the operation of controls and locomotive lighting. The batteries are charged from the main generators at idling speeds and additional battery charging is obtainable at high generator voltages by means of a connection to the teaser generator field.

The air for engine starting is provided, independently

of the brake system, by a 3-hp. gasoline-engine-driven compressor which builds up pressure in the storage reservoirs to a maximum of 350 lb. When the tanks are fully charged there is sufficient air to start both engines about 20 times. The engines will start on a pressure as low as 150 lb.

The locomotive will function satisfactorily on either one of the two main power plants.

The air-brake equipment is Westinghouse schedule 14-EL. The master controller is the General Electric PCL single-end control.

Air for the operation of the brakes is furnished by two CP-127 motor-driven compressors having a capacity of 50 cu. ft. per min. Each of these compressors is driven independently by current from one of the main generators and the air supplied by them is used only for the brake system.

The maximum tractive force is 36,500 lb. with 25 per cent adhesion, while at 10 m.p.h. it is 13,970 lb. The maximum speed is 40 m.p.h. The motor drive gearing is in the ratio of 18 to 65. The tractive force rating is based on 250 hp. actual engine input to each generator for traction.

### Outlook for Wage Cut and Legislation

(Continued from page 732)

mission with a rate-increase application. As pointed out in last week's issue J. J. Pelley, president of the A. A. R., said on April 8 that he did not expect the carriers to go back to the I. C. C. so soon after they had received the Ex Parte 123 decision's answer to the rate-increase question. Similarly, a subsequent report that another general increase of five per cent would be sought has been denied.

Chairman Jones of the Reconstruction Finance Corporation discussed the railroad situation briefly at his April 14 press conference. He said that R. F. C. did not originate the proposal to remove from the law the requirement whereby the Interstate Commerce Commission must certify that a loan-seeking railroad is not in need of financial reorganization; although he has always felt that loans should be made on the basis of security rather than on certification. Also, Mr. Jones thinks that railway traffic will pick up in the Summer, when the crop movements start, and thus conditions will improve regardless of what else may be done for the railroads.



Bus Terminal Built by the City of Hackensack, N. J., as a W.P.A. Project, for the Use of All Lines

# **Motor Transport Section**

# Bush Terminal Performs Truck Service for New York Roads

Brooklyn company picks up and delivers for nine main-line carriers in Brooklyn, N. Y., area

JOINT pick-up and delivery service for railroad l. c. l. shipments in the Brooklyn, N. Y., area is performed for nine trunk-line carriers entering New York by the Bush Terminal Company, a warehouse and transportation organization occupying some 55 acres (exclusive of pier space) along the lower waterfront in the borough of Brooklyn, New York City. The Bush Terminal properties are divided into four divisions: piers and warehouses, trucking, distribution and railroad. While each of these divisions is headed by a superintendent and maintains a separate operating office, their operations are closely co-ordinated so that the shipper using facilities of more than one division need negotiate solely with the Bush Terminal Company. The elasticity of this management scheme is illustrated by the tie-up between the railroad and trucking divisions in the performance of street collection and delivery of l.c.l. shipments for main-line railroads.

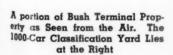
#### The Railroad Unit

The Bush Terminal Railroad Company, a unit of Bush Terminal, operates a terminal property of some 20 miles of tracks among the loft, storage and pier facilities of the Bush Terminal area. It maintains three public freight stations for carload delivery and a station at Forty-eighth street for less-than-carload freight. For

classification purposes, it operates a yard of 1,000-car capacity at a central point and had seven Diesel-electric switching locomotives in service. Since a large part of its operations require marine transit, the road also operates a fleet of seven large freight car floats (six all-steel) and two tugs.

The railroad fulfills two chief functions—it performs terminal operations in Brooklyn for the carriers entering New York, and, secondly, it furnishes rail siding facilities to the numerous tenants of Bush Terminal piers, loft buildings and warehouses and to industries adjacent to the terminal property. To make connection with line haul carriers, the road operates a 24-hr. carfloat service on scheduled sailings between Bush Terminal, located on the harbor several miles south of Manhattan, and the car-float bridges maintained by the Pennsylvania, the Central of New Jersey, the Lehigh Valley, the Baltimore & Ohio, the Delaware, Lackawanna & Western, the Erie, the New York Central, the West Shore, the New York, Ontario & Western and the New York, New Haven & Hartford at various rail heads on the New Jersey shore of the Hudson river, on Manhattan island and along the Harlem river.

In handling these connections, the Bush Terminal Railroad acts as the originating or delivering carrier and serves as a south Brooklyn outlet for carriers which, otherwise, would have to maintain separate piers and



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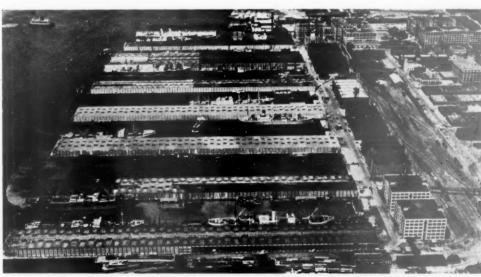


Photo by Fairchild Aerial Survey, Inc.



Street-End of the 800-ft. Freight Station at Forty-Eighth Street

car-float services to offer adequate freight station facilities to that important industrial and consuming section of Brooklyn borough (population in 1930, 2,560,401). As an industrial switching road, Bush Terminal furnishes track-side facilities to each building in the terminal area for both carload and less-than-carload shipments. The latter are handled by a scheduled ferry-car service between the buildings and the Forty-eighth street l. c. l. station where the shipments are transferred to the cars of line-haul carriers. Upon shipper demand, the road will also consolidate shipments for pool-car operation. It should be noted, however, that this building-to-building l. c. l. service is not regarded as storedoor delivery.

#### A Joint Store-Door Service Is Performed

As an extension of its service for the main-line carriers, Bush Terminal inaugurated collection and delivery service by motor truck on through l. c. l. rail shipments shortly after the general establishment of such service in the New York area by most of the carriers in November, 1936. Bush Terminal performs this service for all its main-line connections named above, with the exception of the New York, Ontario & Western which has not filed general store-door tariffs to cover the borough of Brooklyn.

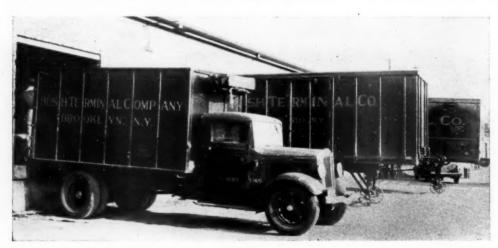
In its performance, collections and deliveries are made by motor trucks of the trucking division of the Bush Terminal Company for shippers and consignees located in Brooklyn within a radius of from four to five miles of the terminal site. Individual pick-ups and deliveries beyond this area are performed when occasion arises. As the store-door service is but a part of the functions which the trucking division performs; no isolated statistics as to employees, equipment or costs involved specifically in store-door operations are available. Furthermore, the entire Bush Terminal highway vehicle fleet of 37 trucks, 3 tractors and 8 semi-trailers are maintained at the central equipment garage operated by the terminal company under a separate maintenance staff which also has supervision of intra-terminal and platform vehicles. The operating personnel of the trucking division proper averages between 75 and 80 men and is under the direction of a superintendent of trucking.

#### From Rail-Head To Consignee

Bush Terminal's first contact with inbound 1. c. l. shipments is at the railheads of the main-line carriers. With the exception of goods received from the New York Central which are trucked by the terminal company in shuttle service between the Central's Thirtysecond street station in Manhattan and the Bush Terminal 1. c. 1. freight station, these shipments are carried in the incoming cars on car-floats to the terminal property where the cars "disembark" and are switched to the Forty-eighth street freight station. Here the shipments are transferred to platform trucks. The latter are tagged with individual numbers, a notation of which is marked on the freight bill of each shipment. By this means, when the loading of store-door trucks is performed, the freight handler has only to refer to the designation on the freight bill to determine the platform truck on which each individual shipment is to be found.

The greater part of the loading of the delivery trucks commences between 10 or 10:30 p. m. Shipments received from all nine line-haul carriers are combined and re-classified according to street destination by the night clerk.

Once placed on the motor trucks, the shipments are under the jurisdiction of the trucking division, the office of which receives a "recap" sheet from the railroad unit and duplicates of the freight bills. Delivery drivers set out on their routes early the following morning and return with delivery receipts and c. o. d. collections which



Type of Truck Employed in Store-Door Service Shown Loading at L. C. L. Platforms

are turned over to the railroad office for accounting and billing of the line-haul carriers.

Shipments brought in by the pick-up trucks during the day up to 4 p. m. are loaded directly on to railroad cars which are floated to the rail-heads in time for outgoing manifest trains leaving the same day or early the next morning.

The Forty-eighth street freight station is a brick structure approximately 800 ft. long having a number of railroad loading tracks along one side and street motor truck tailboard space along the other. Of this, a section about 100 ft. by 40 ft. is reserved exclusively for the

handling of store-door shipments. Hand-pushed "wheelers" are used for the transfer and storage of all l. c. l. shipments except in rush periods when Mercury tractors are pressed into service.

On the average, about 15 railroad cars of l. c. l. shipments are handled daily by the station. Trucks in store-door service perform an average of 3,000 shipment deliveries and 3,000 pick-ups each month, involving a total traffic of approximately 18,000 pieces. Between 75 and 100 calls compose the daily routine of the store-door trucks, the majority of which are repeated daily.

# Buses for Many Purposes

Norfolk Southern gives a wide variety of service in Virginia and North Carolina

THE Norfolk Southern was one of the pioneers in the establishment of rail-highway co-ordinated passenger service. Within a decade, the operations of its bus subsidiary, the Norfolk Southern Bus Corporation, have grown from a few scattered lines to include a large number of through schedules and a wide variety of bus services in southeastern Virginia and northeastern North Carolina. The bus company operates through routes between Norfolk, Va., and Raleigh, N. C., with connections north to New York and south to Florida, as well as numerous branch lines.

#### Resort Service

An important part of the operations are the routes that serve the various seaside resorts on the Atlantic ocean and Chesapeake bay. These include two separate routes between Norfolk and Virginia Beach and one to Ocean View on the Atlantic, and another route to Chesapeake Beach on the bay.

The Virginia Beach routes are co-ordinated with the

it et d rail service to that point, and the tickets are interchangeable, it being possible to use the railway one way and the highway the other. Railway service is provided by rail motor cars equipped with automotive engines. The downtown station at Norfolk is one and one-quarter miles from the business district. Accordingly, these rail cars are operated between Virginia Beach and the suburban Park Avenue station of the Norfolk Southern. At this point, transfer is made to the N. S. buses which operate to and from the union bus terminal in Norfolk, which is only a block or two from the principal hotels and half a block from the business and shopping center. This bus station was constructed a few years ago on the initiative of the Norfolk Southern and the civic authorities on the site of a former municipal market.

The extent of this resort travel is indicated by the fact that during the busy season the N. S. operates 12 bus schedules daily in each direction between Norfolk and Virginia Beach via the south route and 10 in each direction via the north route, in addition to 11 schedules in each direction provided by the "railbuses" on the



Modern Equipment Serves Virginia and North Carolina



Commodious Buses Are Used by the Norfolk Southern for Its Rapidly Increasing Business in Historical and Garden Tours

railway. This total of 33 schedules in each direction daily provides the passenger with an extremely flexible service. Both the highway and the rail routes operate parallel with the beach and only a block or two distant from it for several miles, and many stops are made, thus giving the passenger approximately the same convenient arrival and departure facilities as though he were driving his own car, and relieving him from traffic worries.

#### Co-Ordinated Services

A co-ordinated bus-steamship service is provided between Virginia Beach and the various docks. Four bus connections for steamship passengers are operated daily to the Merchants & Miners Company dock and to the docks of the daily steamers from Norfolk to New York, Washington and Baltimore.

An interesting rail-ferry-bus co-ordinated service is operated in connection with the Pennsylvania ferry and rail route between Norfolk and New York. The passenger uses the Pennsylvania from New York to Cape Charles, Va., on the southern tip of the northern peninsula by rail. The sleeping cars are parked immediately adjacent to the ferry dock at Cape Charles, and from there the passenger proceeds across Hampton Roads via fast, streamlined ferries to Little Creek, Va., thence via Norfolk Southern buses to downtown Norfolk, a dis-tance of seven miles. The northbound movement is handled in the same manner, except in reverse, and, despite the necessary transfers, the trip is so arranged as to eliminate inconvenience to the passengers. The N. S. operates ten bus schedules in each direction daily between Norfolk and Little Creek to make connections with the frequent ferry service, these buses also handling a considerable suburban business to and from intermediate points en route.

#### Other Services

The Norfolk Southern operates several through bus schedules daily between Norfolk and Raleigh, N. C., a distance of some 222 miles, and these, in connection with the rail schedules, provide the passenger with a flexible service between these terminals and intermediate points. Also, by means of its own branch line schedules and operating arrangements with other companies such as the Virginia Dare Transportation Company and the Seashore Transportation Company, the Norfolk South-

ern provides a comprehensive passenger service not hitherto available to the points situated on the heavily indented coast line of northeastern North Carolina.

The Norfolk Southern has also built up a considerable charter business for its buses. Special parties to the beach resorts are numerous, and, in addition, there is quite a demand for charter service to such historic spots as Jamestown, Va., Yorktown and Williamsburg, particularly since the latter city has been restored to a replica of what it was in pre-Revolutionary days.

In the past few years, the N. S. has also built up a growing and profitable business in garden tours in the form of all-expense trips to the famous Virginia and Carolina gardens. These include a five-day tour which goes as far south as Charleston, S. C., and two two-day tours, and are so scheduled as to reach the gardens on days when the blooms are at their height.

The Norfolk Southern operates a considerable package, baggage and express business, as well as handling perishable traffic in small quantities between Norfolk and North Carolina points by means of its numerous and prompt schedules on the highway and the railway. Small packages are called for and delivered in either Norfolk or Virginia Beach at a flat charge of 20 cents per 100 lb., regardless of contents. Between the two cities, both the railroad and bus routes traverse a truckgardening territory and the buses handle perishable freight in packages of 100 lb. or less, giving a prompt and efficient service.

## Public Utility Fleet Meeting by S. A. E.

TWO-DAY meeting devoted to discussions of motor vehicle problems of public utility fleet operators will be sponsored by the transportation and maintenance section of the Society of Automotive Engineers, to be held in the Hotel Statler, Cleveland, Ohio, on April 28 and 29. "Present and Future Trends in Public Utility Truck Bodies and Equipment," the opening paper of the meeting, will be presented on Thursday, April 28. The Friday morning session will be devoted to the reading of a paper on "Application of Truck Chassis to Public Utility Use." A three-paper symposium will be held in the afternoon, and the public utility fleet supervisors' conference will be held in the evening.

# Rail-Bus Co-ordination Approved

Atchison, Topeka & Santa Fe gets permission from California commission to operate intrastate coaches in connection with streamlined trains

THE California Railroad Commission has approved the application of the Atchison, Topeka & Santa Fe for the operation of intrastate bus service between many points in California, which will also involve reduced fares, complete interchangeability of tickets between rail and bus, and the operation of additional streamlined trains.

The Santa Fe Trail Transportation Company, a subsidiary of the railway, now operates interstate buses, as part of its Chicago-California service, between San Francisco and Los Angeles via the San Joaquin valley; between San Diego and Los Angeles via Oceanside; between Los Angeles and Needles via San Bernardino; and between Bakersfield and Barstow via Mojave. The applications approved comprise permission for intrastate as well as interstate operations on these lines, as well as intrastate operations on new lines, as follows:

San Francisco-Los Angeles, via Richmond, Pittsburgh and Stockton.

Los Angeles-San Diego, via Santa Ana and San Juan Capistrano.

Porterville-Hanford, via Lindsay and Visalia.

The service the Santa Fe plans to establish will be a completely co-ordinated one, comprising full optional routings via rail or bus or in combination to common points. All bus and rail-coach tickets will be interchangeable, with unlimited stopover privileges, and the rate will be at 1½ cents per mile via the shortest rail-bus route. Under this rate, the fare between San Francisco and Los Angeles, for example, will be \$6 one way, as compared with the present lowest all-rail coach rate of \$9.47, and the present lowest bus fare of \$6.75.

The new streamline trains to be operated between Oakland and Bakersfield, in connection with bus service between Oakland and San Francisco, and between Bakersfield and Los Angeles, will bring the scheduled running time between San Francisco and Los Angeles down to 9 hr. 35 min., as compared with the best rail time via the coast route of 9 hr. 45 min.; and via the San Joaquin Valley of 13 hr. 42 min., and the present best bus time of 11 hr. 40 min. Fares and running times will be reduced proportionately between intermediate points on the San Francisco-Los Angeles run, and on the other proposed new schedules.

The equipment used will be of the latest type, both trains and buses. Large observation type buses are now used in train connection service between Oakland and San Francisco via the Bay bridge. This fleet will be augmented to meet the new rail-bus high-speed schedules. Two new Diesel-electric streamlined, light-weight steel trains will each make a round-trip daily between Oakland and Bakersfield. Between Bakersfield and Los Angeles, new luxury buses will be used. Between Los Angeles and San Diego, the passenger will have the choice of new luxury buses, or a new six-car, Diesel-electric, streamlined, lightweight steel train, which will make two round trips daily. The buses between Bakersfield and Los Angeles will be high-speed types, and they will operate over the Ridge Route "High-Gear" highway, a distance of 112 miles, which is 170 miles shorter



One of the Modern Buses to be used in the Santa Fe's New Intrastate Service in California

than the Santa Fe all-rail route between those two points.

The new service will mark the participation of the Atchison, Topeka & Santa Fe in Los Angeles-San Francisco passenger business for the first time since federal control. At that time, the Santa Fe operated overnight trains between the two points, but these were ordered stopped by the federal manager, because of the circuitous rail route of the Santa Fe between the two cities, and were not re-established upon the expiration of federal control.

This decision on the part of the California Railroad Commission marks the end of the longest and one of the most important and bitterly contested cases ever heard by that body. The applications were originally filed by the Santa Fe Transportation Company on October 7, 1935. The first hearings opened in Los Angeles on March 3, 1936, and subsequent hearings were held at Long Beach, San Diego, Santa Ana, Bakersfield, Visalia, Fresno, Merced, Stockton and San Francisco, where the final hearing was held on June 25, 1937. In all, there were 148 days of hearings in a space of over a year; 17,205 pages of transcript, comprising more than 5,000,000 words were submitted; 855 exhibits were placed on file, and 584 witnesses appeared before the commission.

# NEWS

## Daylight Saving Shifts Schedules

New time-tables effective on April 24 contemplate several changes

The carriers, in issuing their new timetables, coincident with the inauguration of daylight saving time at urban points at 2 a. m. Sunday, April 24, aside from routine changes in departure time to jibe with the pushing of clocks one hour ahead, contemplate several important changes in run-

ning time and service.

The Delaware, Lackawanna & Western has announced that with the Spring change of timetables it will shorten the running time of several through trains between New York and Buffalo, N. Y., and will inaugurate a new service between New York and Syracuse, N. Y. In addition, effective April 24, all through line trains will carry completely air-conditioned coaches and Pullman cars. Specific timetable changes include a slash of 15 minutes in the running time of train No. 7 between New York and Chicago, and a cut of 10 minutes in the running time of No. 9 between New York and Buffalo. The eastbound Lackawanna Limited will leave Chicago an hour later, arriving in New York at the same time as at present. A new evening train from Binghamton, N. Y., to Syracuse will be inaugurated. Its schedule calls for departure from Binghampton at 9:45 and arrival in Syracuse at 11:50 p. m.

The Norfolk & Western and connections will cut one hour from the running time of train No. 21 from Norfolk, Va., to New York, which will leave its southern terminus at 8 p. m., instead of 7 p. m., as at present. The westbound Pocahontas, between Norfolk and Chicago, will leave Norfolk 15 minutes later than at present with the same arrival time at Chicago, while No. 23, running from Norfolk to Cincinnati, Ohio, will slash 25 minutes from its run, leaving Norfolk at 9:10 a. m., instead of 8:45 a. m., as at present.

The New York Central will change the departure times of its Twentieth Century Limited and other important trains to conform to Daylight Saving Time. The World's Fairliner will leave Chicago at 10:50 a. m. (daylight time) and will run through to New York in 19 hours and 40 minutes, thereby cutting the time by one hour, and providing early morning arrival in New York at 7:30 a. m. (daylight time). The Detroiter, whose run has been discontinued for some time, will be re-

stored; it will leave Detroit, Mich., at 7 p. m., arriving in New York at 8:50 a. m. (daylight time). The westbound schedule of this train will be quickened by 20 minutes. The running time of the Ohio State Limited, New York-St. Louis train, will be shortened by 25 minutes to Cincinnati, Ohio, and by 22 minutes to St. Louis, Mo.

The Lake Shore Limited, New York-Chicago train, will be scheduled to depart from New York at 7:15 p. m., thereby shortening the running time by 15 minutes. The westbound schedules of both the Niagara and the North Shore Limited will be quickened, the former by 25 minutes

and the latter by 30 minutes.

The Baltimore & Ohio will put into effect on April 24 important changes in schedules of some of its principal passenger trains between New York, Philadelphia, Pa., and Wilmington, Del., and Chicago, Cincinnati, Ohio, and St. Louis, Mo. The "Shenandoah," New York-Chicago express, will cut off an hour in its running time, while the "National Limited," New York-St. Louis train, will save a half-hour.

#### Status of RFC Rail Loans

The monthly report of the Reconstruction Finance Corporation as of March 31, shows disbursements to the railroads of \$550,659,239 and repayments of \$182,188,-521.

#### Railway Development Group Cancels Summer Meeting

The American Railway Development Association has cancelled its summer meeting, "due to general conditions in the railroad field." The Fall meeting has not yet been decided upon.

#### R. I. Affiliate Would Purchase New Routes

The Rock Island Motor Transit Company, affiliate of the Chicago, Rock Island & Pacific, has applied to the Interstate Commerce Commission for authority to acquire the operating rights of George H. Swaim on routes between Kansas City, Mo., and Topeka, Kan., and Kansas City and Atchison, Kan.

#### House Gives Grade Crossing Elimination \$40,000,000

The House on April 19 passed the Department of Agriculture appropriation bill for the fiscal year 1939, carrying an appropriation for the Bureau of Public Roads. The item for elimination of grade crossings was doubled by an amendment on the floor, thus increasing the committee recommendation of \$20,000,000 to \$40,000,000 for the next fiscal year.

## Plan to Re-open Westchester Line

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Bondholders proposal released as Lehman vetoes public ownership bill

Resumption of train service on the idle New York, Westchester & Boston and operation of the road on a new basis has been proposed in a plan recently released by the protective committee of the first mortgage bondholders of the road, I. A. Sartorius, of New York, chairman. Concurrently, Governor Lehman of New York has vetoed a bill which would authorize public ownership and operation of the road.

According to the 15-page report of the bondholders' committee, the electric suburban road, which, as a bankrupt carrier, ceased operation on December 31, 1937, could be placed into profitable operation if certain former items of expense could be reduced or eliminated. While it is emphasized that if service had not been terminated at the end of last year, economies contemplated in the plan would not be possible, nevertheless resumption of operation is deemed desirable as soon as possible, as sale of the railroad properties would yield "practically nothing," and arrears in taxes would permit communities along the line to acquire the property without payment to the bondholders. It is the opinion of the committee that "the only prompt method of obtaining a substantial recovery for first mortgage bondholders (in addition to payment under the New Haven guarantee which would not be affected by this plan) is by operation as a railway and subsequent reorganization on Elsewhere it is stated: "If that basis." operations are not resumed promptly, net proceeds from sale of the property will be practically nil."

Based upon a special study made by L. H. Brown for the committee, it is estimated that, with certain changes of operation discussed below, and on the basis of average monthly revenue for the 10 months of 1937 (during which the Port Chester branch was in service), the net income of the road, after payment of revised taxes leases and car rentals, but before depreciation and interest, will be \$27,611 per month. Total expenditures required to resume operation are placed at below \$35,000.

The New York, New Haven & Hartford, which guaranteed payment of principal and interest on \$19,200,000 of a total of \$22,310,000 first mortgage bonds outstanding of the Westchester, would also gain by the plan, according to the com-

mittee. The trunk line carrier would receive \$90,000, annual rental under leases; some \$36,000 to \$84,000 annual rental for cars and increased power charges, if any; a "substantial" freight income; good will; and elimination of over-crowded commuters trains serving Westchester territ-

The following economies are provided for by the plan: (1) reduction of trains from 244 to 129 per 24 hours; (2) closing of 5 stations and creation of new arrangements regarding agents at the remaining 31 stations; (3) reduction of overhead and administration expenses; (4) reduction of franchise obligations and franchise and real estate taxes; and (5) reduction of payments to the New Haven road, with, however, assurance of substantial income. It is estimated that, as a result of these economies, operating savings will accrue to the amount of \$48,127 per month, as compared with the monthly average for the first ten months of 1937. Payments to the New Haven for lines and stations as proposed will amount to an average of \$7,500 per month, as compared with \$33,500 per month for all lines and stations before the Westchester entered the 77B proceedings. In addition, it is planned that an average of \$200 per month will be paid to the New Haven for equipment rentals and additional power charges, if any,

Concerning reduction in taxes, it is declared that a 50 per cent reduction in municipal real estate taxes would bring a total monthly saving of \$10,000 which, it is indicated, would be more than offset by the restoration of real estate values and resulting higher private realty tax reverges.

Governor Lehman of New York has vetoed a bill which would authorize creation of a Westchester and Bronx Railroad Authority to acquire and operate the property of the New York, Westchester & Boston, which bill was abstracted in the Railway Age of March 26, page 577. In support of his refusal to approve the bill Governor Lehman declared that in his opinion it is unsound to extend the operation by a public authority the field of railroad operation and that such public bodies should be created for only "very special situations."

In conclusion he asserted: "It is unwise to have government create a public benefit corporation with the color of governmental authority and sanction for the purpose of acquiring and operating a private railroad running through several communities, which has since been forced to discontinue its services." The Governor's message also stated that Mayor LaGuardia of New York City had opposed the bill on the grounds that on the creation of such authority losses of operation of the Westchester road would be shifted to the taxpayers of the city of New York.

#### Philadelphia Traffic Club Opens New Headquarters

The Traffic Club of Philadelphia, Pa., this week established new permanent head-quarters in the Benjamin Franklin Hotel. To mark the occasion an informal buffet luncheon will be held in the new meeting rooms on April 29, to which have been

invited the presidents of neighboring city traffic clubs and the heads of traffic and transportation organizations in Philadelphia.

#### Former Russian Rail Commissar Returns to Post

L. M. Kaganovitch, who vacated the chief executive post of the Soviet railroad system in 1937 to become commissar of Russia's heavy industries, has been returned to chieftainship of the carriers, replacing Commissar A. V. Bakulyn, who has served as railroad head for the last seven months. Kaganovitch will continue also as commissar of heavy industry. No explanation for the shift has been offered by governmental authorities, according to news dispatches.

#### U. P. Bus Operations

Examiner W. T. Croft of the Interstate Commerce Commission, in a proposed report to the commission, has recommended that it authorize the Union Pacific Stages of California, a Union Pacific affiliate, to operate as a common carrier by motor vehicle between Long Beach, Calif., and Los Angeles over a specified route, and between Los Angeles, Calif., and South Alhambra, over a route via Pasadena to be used as an alternate route in connection with existing operations.

#### Barge Line Labor Dispute Settled

The labor dispute between the Federal Barge Line and the Inland Boatmen's Union ended on April 12 with the signing of an agreement covering terminal operations at New Orleans, La., Baton Rouge, Vicksburg, Miss., and Helena, Ark. The agreement includes an eighthour day, time and a half for over-time, guarantee against discrimination for union activities, and the setting up of an arbitration of the wage scale at terminals by a representative of the Department of Labor.

#### W. C. Dickerman to Address Western Railway Club

The next meeting of the Western Railway Club, to be held Monday evening, April 25, at the Hotel Sherman, Chicago, will be a "Steam Locomotive Night" with discussion centered about the latest developments in locomotive design as well as present-day performance and future possibilities. The principal address entitled "Possibilities of the Modern Steam Locomotive," will be presented by W. C. Dickerman, president, American Locomotive Company.

#### New England Transportation Co. Permit Recommended

Examiner Paul R. Naefe, of the Interstate Commerce Commission, in a proposed report to the commission, has recommended that it authorize the New England Transportation Company, a New York, New Haven & Hartford subsidiary, to operate as a common carrier of general commodities over specified routes in Massachusetts, Rhode Island, Connecticut, New York and New Jersey. The examiner has also recommended that the commission deny an accompanying application re-

questing permission to operate in the same States as a contract carrier.

In reaching the conclusion that the New England Transportation Company is performing a common carrier service, the examiner reasons that "while the applicant's operation for the railroad is governed to some extent by its oral contract with the railroad, its participation in this rail-motor service makes it apparent that applicant holds itself out to perform, and does perform, its portion of such service directly for the public."

#### Quebec Seeks Old C. N. Rights-of-Way for Highway Construction

The Road department of the province of Quebec, Canada, has filed application with the Canadian Board of Railway Commissioners for permission to acquire the abandoned right-of-way of the Canadian National between Farnham and Iberville which the department plans to convert into a first-class highway eliminating six miles from the present circuitous route between the two towns. The old ballast left on the right-of-way will serve as the road foundation and save an important part of construction expenses. The road department has also considered taking over the present right-of-way between St. Isadore and the American border near Plattsburg, N. Y., which the Canadian National is seeking to abandon. The building of a highway along this route will shorten the distance between Montreal and Plattsburg. N. Y., by 16 to 17 miles, department officers estimate.

#### Budd Instead of Jeffers to Address Passenger Meeting

Ralph Budd, president of the Chicago, Burlington & Quincy, will be the principal speaker at the third annual dinner and educational meeting to be given under the auspices of the Central and Western passenger associations for passenger traffic salesmen and other representatives in Chicago on April 25. Due to unforeseen circumstances, William M. Jeffers, president of the Union Pacific, who was announced in the Railway Age of April 16, page 715, as the speaker on this occasion, will be unable to be present.

#### New York Commission Approves C. & O. Control of Erie

Direct ownership of the Erie by the Chesapeake & Ohio, which was effected on January 29 through the purchase of capital stock from the Alleghany and Virginia Transportation corporations, Van Sweringen holding companies, was approved, in effect, by the Public Service Commission of New York, after proceedings, of several months duration, which were initiated because of an alleged violation by Virginia Transportation of a New York state law which prohibits the acquisition of more than 10 per cent of voting control of a railroad chartered in New York without authority of the Public Service Commission. In its written decision on the case the commission pointed out that in view of the fact that the Interstate Commerce Commission had already approved control of the Erie by the Chesapeake & Ohio,

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issuance of an order by the state commission directing the Erie to cancel the Virginia Transportation holdings on its books "can accomplish no beneficial results." Proceedings were, therefore, dismissed on April 19.

#### A. C. L. Safety Group "Puts On" Over Seven Thousand Programs

Representatives of the Atlantic Coast Line's department of insurance and safety made 1,042 appearances before school and other public groups during the school year 1937-1938, up to and including April 5, according to Robert Scott, director of the department. It is estimated that during these appearances 374,931 persons heard the safety programs. In previous years of the program, company representatives made a total of 6,156 appearances, bringing the grand total to 7,198 separate public programs presented, attended by 2,123,-771 persons.

#### Income Statements of Class I Truckers in Central Territory

Class I common carriers of property by motor vehicle, which are respondents in the Ex Parte No. MC 21 investigation of motor carrier rates in Central territory, were required by the Interstate Commerce Commission to file by April 22 income statements for 1937 and for the months of January and February of this year. The Class I truckers are those with gross revenues of \$100,000 or more annually.

The order, to which was attached a form for the filing of the statements, says that the data "are desirable to aid the commission in the determination of the aboveentitled proceeding."

#### No P. & S. Convention

A decision has been reached by the general committee of the Purchases and Stores Division, A. A. R., to hold no annual meeting of the division this year. Business conditions and necessity for the railroads and the A. A. R. to curtail expenses to the greatest possible extent are given as reasons for the action. Committee reports containing definite recommendations will be considered by the general committee so that important subjects that might produce economies will be passed on promptly to the individual carriers. and reports requiring further action will be subject to letter ballot vote and formal approval by the division at its next annual

#### Austrian Railways Absorbed by Reichsbahn

In the course of absorption of Austria by Germany, the former Austrian Federal Railways have been taken over by the German State Railway (Deutsche Reichsbahn), effective March 17, according to consular reports. By reason of the consolidation, the railroad property formerly held by the Austrian republic has been deeded to the German government and management has been assumed by the staff of the German State Railway. However, the former administrative staff at Vienna will continue to function as a sectional management for Austria. The offices of the Austrian ministers of transport and

finance are to be continued temporarily and will be concerned especially with negotiations with the remaining private railways in Austria.

As an independent organization, the Austrian Federal Railways comprised 5,306 kilometers of standard gage and 491 kilometers of narrow gage lines. Rolling stock included 2,040 steam locomotives, 218 electric locomotives, 4 Diesel locomotives, 2 benzol locomotives, 88 rail motor-cars, 7,836 passenger-train cars and 33,725 freight cars.

#### Roads to "Motorcade" in World's Fair Preview

The Eastern Presidents' Conference and its constituent roads and railroad affiliates, including Central Greyhound (motor bus) Lines and Railway Express Agency, Inc., will participate on April 30 in a "motorcade" which will be the main feature of a "Preview of the World of Tomorrow" presenting the theme pattern of the New York World's Fair of 1939. The "motorcade," consisting of approximately 600 vehicles carrying floats, will include a large section devoted to the portrayal of the development of transportation. The route, as planned, runs through Manhattan and Queens boroughs of New York City, ending at the fair site in Flushing.

#### March Operating Revenues 25.8 Per Cent Below 1937

Preliminary reports from 89 Class I railroads, representing 82.8 per cent of total operating revenues, made public today by the Association of American Railroads, show that those railroads, in March, 1938, had estimated operating revenues amounting to \$232,006,029 compared with \$312,-864,712 in the same month of 1937 and \$370,826,059 in the same month of 1930. The March gross was 25.8 per cent below that of March, 1937, and 37.4 per cent below March, 1930.

Freight revenues of the 89 roads in March amounted to \$185,216,473 compared with \$259,648,535 in March, 1937, and \$285,480,962 in March 1930—28.7 per cent below the former and 35.1 per cent below 1930. Passenger revenues totaling \$25,552,683, were 10.7 per cent below March, 1937's \$28,624,128 and 49.9 per cent under March, 1930's \$50,970,118.

#### Broadway, Carrying New Cars, to Make Sixteen-Hour Run

The Pennsylvania's Broadway Limited, carrying new equipment, will run between New York and Chicago in 16 hours, effective June 15, reducing the New York-Chicago schedule by 30 minutes in both directions. The newly designed Pullman cars, the features of which were announced by the road in the Spring of 1937, are now being turned out of the Pullman shops in Chicago. All sleeping cars of the new Broadway will be exclusively of the private room type; open sections will be entirely eliminated.

The new equipment was designed jointly by engineers of the railroad and the Pullman Company, in collaboration with Raymond Loewy, industrial designer. The new cars will be placed not only on the Broadway but will also be used to re-

equip partially the east and west bound General between New York and Chicago; the Liberty Limited between Washington, D. C., and Chicago; and the Spirit of St. Louis, between New York and St. Louis, Mo. Modern open section Pullman sleepers will also be carried on the last three trains.

#### P. R. R. Initiates Electrified East and West Freight Service

The Pennsylvania on April 15 inaugurated through electrified freight service between New York and Harrisburg, Pa., and between Perryville, Md., and Harrisburg, which step was made possible by completion of electrification of the so-called lowgrade freight routes supplementing the main line between Morrisville, Pa., and Harrisburg. Completion of work between Perryville and Harrisburg affords through electric service to and from southern points.

Inauguration of this service completes the electrification project of the Pennsylvania for road haul service and will now permit the road "to reap on a broad scale the advantages of this plan for the complete electrification of its principal seaboard lines inaugurated in 1929. The project has also included additional electrification work at main freight yards, including Harsimus Cove, N. J., and Waverly, in the New York area, and Frankford Junction, South Philadelphia and 65th street yard, Philadelphia, Pa.

#### Cleveland, Columbus & Cincinnati Highway, Inc., Acquisition

The Interstate Commerce Commission, Division 5, has denied the application of the Cleveland, Columbus & Cincinnati Highway, Inc., for authority to purchase certain operating rights and property of the Reo Transportation Company. commission's action was based on its finding that the applicant is a railroad affiliate by reason of its joint control by subsidiaries of the Erie, the Pere Marquette and the Chesapeake & Ohio; and thus it comes within the provisions of that section of the Motor Carrier Act which requires a showing that a proposed acquisition "will promote the public interest" by enabling the railroad "to use service by motor vehicle to public advantage ir its operations and will not unduly restrain competition." Sufficient evidence to sustain this required statutory finding was not adduced, says the report.

#### Erie Takes Off Eleven Suburban Trains

The Erie's Northern of New Jersey division, extending from the Jersey City, N. J., terminal to Nyack, N. Y., a distance of 28.1 miles, will cease operation of six westbound and five eastbound trains, effective 2 a. m., April 24, by permission of the Board of Public Utility Commissioners of New Jersey. Curtailment of service does not concern trains operating north of the state line, while two of the service withdrawals concern only cancellation of a section of runs between Northvale, N. J., and Tenafly. In support of its application the Erie presented testimony and exhibits revealing marked reductions in the use of the facilities and mounting operating de-

ficits in recent years, due in part to the increased use of buses operating via the George Washington bridge and Lincoln tunnel for New York commuter service. The shift of business centers in the metropolis has also served to reduce patronage of the line.

# Fruits, Vegetables and Hay in Official Territory

The Interstate Commerce Commission, Division 3, has found not justified proposed increases in rates on carload shipments of fresh fruits, vegetables and hay in Official territory. The proceeding, I. & S. Docket No. 4392, dealt with the attempt of the railroads to correct the "chaotic situation" resulting from the maintenance of a dual system of rates on the commodities involved—a situation which grew out of the fact that alternative provisions, maintained in tariffs since the Eastern class rates decision of 1930, authorize the use of new rates prescribed in that proceeding or the old rates, whichever are lower.

The decision points out that "for the most part the old rates are lower than the new rates, although in a number of instances the reverse is true." However, the proposal was rejected because of "the complete failure" of the respondent railroads to justify such increases as would have resulted.

#### Diesel Trains Purchased by Brazil Road

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The Central of Brazil has recently received five Diesel-powered trains built by the Fiat Company, Italy, according to the office of the American commercial attache at Rio de Janeiro, Brazil. Each train consists of two cars which seat 63 passengers each and are provided with air-conditioning equipment, buffet facilities, folding tables and electric refrigeration. Each car is powered by two Fiat Diesel engines of 145 hp. each. Purchased for service between Rio de Janeiro and Sao Paulo and from Rio de Maneiro to Bello Horizonte, the new equipment will supplement the older rolling stock already assigned to these routes.

On a trial run made with one of the new rail cars last February the trip between Rio de Janeiro and Sao Paulo was made in eight hours and ten minutes, including stops totaling 37 minutes in duration and reached a speed of 90 kilometers per hour (56 m.p.h.).

#### Would Put Storedoor Service Under Motor Act

Senator McNary of Oregon has introduced in the Senate a bill (S. 3829) to amend the Motor Carrier Act so as definitely to place under that act motor carriers engaged in collection and delivery service for railroads. The bill would eliminate from paragraph (14) of subsection (a) of section 203 the following: "Except to the extent that these operations are subject to provisions of Part I."

The status of these terminal truckers was the issue in the Scott Brothers case wherein the Interstate Commerce Commission, as reported in the Railway Age of

March 12, reversed a previous decision of its Division 5 and held that the storedoor services which Scott Brothers performs for its parent railroad (the Pennsylvania) are railroad services subject to regulation under Part I. Division 5, as reported in the *Railway Age* of June 19, 1937, had previously held that the P. R. R. affiliate was a contract carrier subject to Part II, the Motor Carrier Act.

#### Freight Car Loading

Loading of revenue freight for the week ended April 9 totaled 521,978 cars, a decrease of 1,511 cars or three tenths of one per cent below the preceding week, a decrease of 189,101 cars or 26.6 per cent below the corresponding week in 1937 and a decrease of 386,081 cars or 42.5 per cent below the same week in 1930. All commodity classifications except forest products and grain showed increases over the preceding week, while all commodity classifications showed decreases under last year. The summary, as compiled by the Car Service Division, Association of American Railroads, follows:

#### Revenue Freight Car Loading

21010111110	Trongan o	or nouterin	9
For Week	Ended Sati	urday, Apri	1 9
Districts	1938	1937	1936
Eastern	115,353 98,855 34,007 85,912 62,646 84,707 40,498	165,512 157,349 47,407 104,763 81,199 102,583 52,266	141,398 125,612 44,494 91,599 73,382 94,140 51,218
Total Western Districts	187,851	236,048	218,740
Total All Roads.	521,978	711,079	621,843
Commodities Grain and Grain Products Live Stock Coal Coke Forest Products. Ore Merchandise I.c.l. Miscellaneous	28,781 11,090 91,130 4,501 22,502 6,177 150,613 207,184	29,241 11,568 116,226 10,704 35,732 17,450 173,653 316,505	29,299 11,177 111,913 6,951 28,907 8,792 161,575 263,229
April 9	521,978 523,489 572,952 540,332 556,664	711,079 721,229 756,416 754,922 744,499	621,843 613,581 594,789 568,851 616,937
Cumulative Total, 14 Weeks	7,680,205	9,896,380	8,595,435

#### Century Schedule to be Reduced One-Half Hour

A 30-minute reduction in the schedule of the Twentieth Century Limited of the New York Central, operating between Chicago and New York, will be made on June 15, when new streamlined steamoperated trains will be placed in service. To make possible this reduction from 161/2 hr. to 16 hr., the train will leave Chicago at 3 p. m. instead of 3:30 p. m., central standard time, and will arrive in New York at 8 a. m. instead of 9 a. m., eastern standard time, while returning it will leave New York at 5 p. m. instead of 5:30 p. m., eastern standard time, and will arrive in Chicago at 8 a. m. instead of 9 a. m., central standard time.

Because the new Century, an all-room train, will carry no Boston service, a new train, to be known as the "New England States" will be inaugurated between Chicago & Boston on June 15. This train will leave Chicago at 2 p. m., central standard time, and will arrive in Boston at 9 a. m.,

eastern standard time, while returning it will leave Boston at 2 p. m., eastern standard time, and will arrive in Chicago at 8:25 a. m., central standard time. It will be an all-Pullman train of standard Pullman equipment with sections, bedrooms, compartments, drawing-rooms and lounge facilities.

#### Amendment to Carriers' Liability Act

Representative Healey of Massachusetts has introduced in the House H. R. 10296, a bill to amend the carriers' liability act as follows:

"Sec. 10. Any contract, rule, regulation, or device whatsoever, the purpose, intent, or effect of which shall be to prevent employees of any common carrier from furnishing voluntarily information to a person in interest as to the facts incident to the injury or death of any employee, shall be void, and whoever, by threat, intimidation, order, rule, contract, regulation, or device whatsoever, shall attempt to prevent any person from furnishing voluntarily such information to a person in interest, or whoever discharges or otherwise disciplines or attempts to discipline any employee for furnishing voluntarily such information to a person in interest, shall, upon conviction thereof, be punished by a fine of not more than \$1,000 or imprisoned for not more than one year, or by both such fine and imprisonment, for each offense."

As predicted in last week's issue, the House Judiciary committee has reported out H. R. 10250, another bill amending the carriers' liability act.

#### C. & O. Annual Meeting Adjourned by Young Motion

Those present at the Chesapeake & Ohio annual meeting which was scheduled for April 19 in Richmond, Va., adjourned the session until May 10, on motion of Director Robert R. Young, but not before it had been announced that 41 per cent of the voting common stock had declared its confidence in the present management of the road by granting proxies to it and the directorate. Alleghany and Chesapeake corporations, important holders of C. & O. stock, did not vote at the meeting because of an appeal now pending in the United States Circuit Court of Appeals from an order of the United States District court denying Alleghany a preliminary injunction barring the Guaranty Trust Company, New York, from voting a total of 1,278,-000 shares of Chesapeake Corporation stock which it holds as a pledge from Alleghany under certain bond indentures (see the Railway Age for April 2, page 629).

A stipulation filed on April 14 with the appeals court by counsel for Alleghany and the Guaranty Trust Company committed the latter also to refrain from voting at the C. & O. annual meeting. The stipulation, in addition, has the effect of adjourning for the third time a special meeting of the Chesapeake Corporation called by C. L. Bradley, president, for April 4, but deferred, successively to April 11 and April 15. It is this special meeting which is the chief bone of contention between Mr. Young and the present management of the C. & O. as opposed to Mr.

Bradley and the Guaranty, the former charging that their opponents intend to vote the pledged Chesapeake Corporation stock at the special meeting in such a way as to displace the present management of the controlled railway.

#### Equipment on Order

Class I railroads on April 1 had 5,825 new freight cars on order, according to the Association of American Railroads. On the same date in 1937 there were 46,-439 on order, and on April 1, 1936, there were 13,562. On March 1, this year, 5,568 new freight cars were on order.

New steam locomotives on order on April 1 totaled 84 compared with 359 on April 1, last year, and 52 on the same date two years ago. The railroads had 101 new steam locomotives on order on March 1, this year. New electric and Diesel-electric locomotives on order on April 1 totaled 19 compared with 24 on April 1, 1937, and 24 on April 1, 1936. The railroads on March 1, this year had 26 new electric and Diesel-electric locomotives on order.

Class I roads in the first three months of this year installed in service 4,362 new freight cars compared with 12,811 in the same period in 1937 and 2,984 in the same period in 1936. The railroads in the first three months of 1937 also put in service 68 new steam locomotives and 40 new electric and Diesel-electric locomotives compared with 42 steam and seven electric and Diesel-electric locomotives installed in the same period last year, and three steam and one electric in the same period in 1936.

New freight cars and locomotives leased or otherwise acquired are not included in the above figures.

#### Rivers and Harbors Bill Is Reported

The War Department civil functions appropriation bill for the fiscal year 1939 has been reported out by the House committee on appropriations. Included in the bill is an item of \$70,020,000 for the maintenance and improvement of rivers and harbors. This figure is the same as that recommended by the Bureau of the Budget and represents a decrease of \$57,980,000 under the amount appropriated for the fiscal year 1938.

The committee report states that \$3,-000,000 is slated for continuing the canalization of the upper Mississippi, but that ail of this work is to be done below St. Anthony Falls. The bill specifically provides that no funds shall be expended for any work above that point in the river.

The transcript of hearings before the subcommittee reveals that A. L. Jane, assistant general counsel of the Great Northern, and Frederic C. McCarthy, assistant general counsel of the Northern Pacific, appeared briefly before the committee and urged that their respective roads should not be forced to bear the expense of changing the location of certain bridges which would be affected were the channel deepened to nine feet above St. Anthony Falls. Mr. McCarthy pointed out that the total cost to the two roads would be "somewhat over a million dollars," and stressed the fact that they were at present in a "straightened financial condition" and could not afford to do the work. Both counsel urged that if changes had to be made in their bridges, the expense be borne by the Government, as was done in the case of the raising of certain railroad bridges at Bonneville Dam on the Columbia River in Oregon.

Representative Mansfield, of Texas, from the committee on rivers and harbors, has submitted a report on H. R. 10298, a bill authorizing the construction, repair and preservation of certain public works on rivers and harbors. The bill adopts 39 projects, the total cost of which would be \$33,903,850. The report states that the appropriations for these projects would be distributed over a number of years and stresses the fact that no appropriation for the coming fiscal year is called for.

The largest project in the bill is the deepening of the Delaware River between Philadelphia and the sea, to cost \$11,-000,000. Also, \$9,000,000 is recommended for the Houston ship channel and Buffalo Bayou in Texas.

#### Railroader's Wife Stresses Safety as Basis of Earning Power

An expression of gratefulness for increased safety on the railroads and particular concern for the earning power of a railroad worker featured an informal talk presented by Mrs. H. G. Williams, wife of a locomotive engineman of the Delaware, Lackawanna & Western, at a safety meeting held at Syracuse, N. Y., to celebrate the winning of the system safety trophy by the Syracuse and Utica division of the road, Mrs. Williams' talk, which was entitled "Safety from the Viewpoint of a Railroad Man's Wife" concerned itself largely with the importance of safety and the resultant earning power of railroad men for the economic security of their households and expressed also the thought that the wife of a railroad man should do her best to preserve his peace of mind. As Mrs. Williams put it: "I believe that it is the duty of a true wife to share the responsibilities of a tired railroad man and ease his tired body as much as possible."

Speaking of the dependence of earning power of railroad workers upon safety, Mrs. Williams declared: "The majority of railroad men now employed are of an age when they can not obtain work if they lost their jobs, and how many women can go out and earn the equivalent of what our men bring home each pay day should an accident take them away from us, or an act of carelessness put them out of the earning class for weeks, months, or per-

haps for life?"

#### Club Meetings

The Southern and Southwestern Railway Club will hold its next meeting on May 19 at 10 a. m. in the Ansley Hotel, Atlanta, Ga., at which time J. A. Ralston, manager of the railroad research bureau and A. E. Stuebing, mechanical engineer, United States Steel Corporation, Pittsburgh, Pa., will present a paper entitled: "Light Weight Development in Railroad Equipment Using High Tensile Steels." A sound picture will also be shown.

The Indianapolis Car Inspection Asso-

ciation will hold its next meeting on May 2 at the Hotel Severin, Indianapolis, Ind., at 7 p. m.

The Toronto Railway Club, in place of its regular May meeting, will hold a summer outing and dinner meeting on June 4 at Niagara Falls, Ont. Leopold Macauley will be the guest speaker at the dinner to be held in the General Brock Hotel at 7:30 p. m. There will be a golf tournament at Lookout Point Golf Club from 11 a. m. on. During the afternoon members and guests will also have an opportunity of visiting the plants of the Cyanamid Company and the Shredded Wheat Company,

The Metropolitan Traffic Association of New York will hold the next of its traffic lectures on April 28 at the Hotel Imperial. New York, the subject to be "Regulation of Intercoastal Carriers." On May 12 a lecture will be given on the subject of tracing and on May 26 "Motor Truck

Rates" will be discussed.

The New England Railroad Club will hold its next meeting on May 10 at the Copley-Plaza Hotel, Boston, Mass., at 6:30 p. m. The program will comprise an annual banquet and entertainment.

The Car Foremen's Association of Chicago will hold an open meeting night on May 9 at 8 p. m. at the La Salle Hotel, Chicago, Ill.

#### Southern Hearing to Reconvene at Buffalo

The hearing of the application of eight Southeastern governors for a readjustment of freight rates on shipments from the South to the North, which opened at Birmingham, Ala., on April 11 before Commissioner William E. Lee of the Interstate Commerce Commission, was adjourned on April 15 and will be reopened at Buffalo, N. Y., on July 12.

At Birmingham the testimony pertained to rates on such commodities as boots and shoes, drugs and medicine, canned goods, excelsior, electrical appliances, furniture, paper articles and pottery. T. F. Lance, treasurer of the Dortch Stove Works at Franklin, Tenn., contended that his company lost business in 1933 because of freight increases in the South, which business it has never been able to regain. He contended that because of rate differences Illinois manufacturers can sell their stoves from \$1 to \$2 cheaper than those made by his company.

D. D. Sanders, secretary of the Southern Granite Quarries and Manufacturers' Association at Elberton, Ga., testified that higher Southern freight rates reduced business by from 30 to 75 per cent. He said that freight rates from that state are so high that they prohibit the use of any Georgia granite in the North.

#### Illinois Central Lets Employees In On 1937 Results

A financial report for 1937 of the operations of the Illinois Central has been distributed to every literate employee of the road in advance of the railroad's regular annual report to stockholders. Addressed "To the Employe Members of the Illinois Central System:", the four-page special report contains, among other things, a comDoy T seng cost not ditio fina roll and

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parison of revenues and expenses for 1937 and 1936 with increases or decreases for each item listed in a separate column and a fairly lengthy discussion of operating results and problems written by L. A. Downs, president of the road.

The latter includes a discussion of passenger revenues and their relation to low fares, payroll expenses, the increase in the cost of materials, tax levies, and expenses not isolated in the financial account. Additional information apart from routine financial statistics include the number of employees in active duty in 1937, total payroll expenditures, important changes in rolling stock, mechanical improvements, and the purchase of new equipment.

The special report opens with the following paragraph, which serves to introduce the new policy: "It might have seemed strange a dozen or more years ago for the management of a railroad to offer a financial report to its employees in addition to that customarily given its stockholders; but events within recent memory have shown how deep a concern employees must have in the success or failure of the business enterprises which their jobs make possible and upon which their jobs depend. I therefore make no apology for taking you all into full business confidence regarding the operations and results of the Illinois Central System for 1937. This report supplements and interprets the report I must make to our stockholders at their annual meeting."

#### When a Railroad Man Becomes a Truck Driver

What happened to the economic status of a railroad boilermaker who turned truck driver is the story told by H. D. Pollard, receiver of the Central of Georgia, in a recent news letter entitled "Talking Points." First, it is explained that the Central of Georgia pays its boilermakers a base wage of 85 cents per hour, with differentials for some classes of work which raise the pay of certain men to 90 cents and 95 cents per hour. In November, 1937, when all railroad traffic slumped, it was necessary for the railroad to reduce its forces, and about 400 men in the Macon, Ga., shops were laid off.

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Parenthetically, it is here pointed out that the men were not willing to accept a reduction in pay to 75 cents per hour to make it possible for more men to be kept in employment, and, it is emphasized, even if they had been willing to do so, the national labor organizations would not have permitted it.

One of the boilermakers laid off, whose wage had been 90 cents per hour, found employment with a trucking concern in operation between Macon and Chicago. Two drivers were assigned to each truck; each received \$10 for the round trip, Macon to Chicago and return. An expense allowance of \$4 was allotted for the round trip of 1,634 miles, which when prorated over the week, allotted just 19 cents per meal, or 57 cents per day. There was no stopping at inns; the driver not on duty slept in the truck while the other drove.

When these figures are analyzed, it is found that for a 12-hour day (based on an equal division of duty between the two

men) our ex-railroader earned a wage of \$2 per day, or \$10 per week plus \$4 for expenses. This is 16½ cents per hour, as compared with 85 to 95 cents in the railroad shops. Furthermore, the latter scale applies only to employment time under eight hours; in railroad shop practice time-and-a-half is granted for all time in excess of eight hours and for Sundays and holidays. In other words the ex-boilermaker, who received \$14 per week from the trucking concern, would have received \$91.80 from the railroad for the seven consecutive 12-hour days.

Making further comparisons Mr. Pollard points out that an engineer on a through freight run from Macon to Chicago would receive \$71.15 for the trip one way, or \$142.30 for the round trip. This is hypothetical of course, he adds, since one engineer would not be permitted by contract or law to run a train 1,600 miles without provision for sleep and rest.

#### Upward Trend of Fuel Costs Shown in Study

The continued decrease in unit fuel consumption and increase in unit fuel costs is clearly indicated in the accompanying table which has been developed by the Railway Fuel & Traveling Engineers' Association, from data issued currently by the Interstate Commerce Commission, Bureau of Statistics. Fuel figures for January and February, 1938, and a comparison with February, 1937, are given in the table.

With gross ton mileage for February, 1938, reduced 22.2 per cent below February, 1937, values, passenger train car mileage reduced about 2.5 per cent and better unit fuel performance this year in both classes of service, the total cost of fuel and power consumed by the Class I railways at \$19,840,000 was only 13.6 per cent lower than in February, 1937, because of the increase of 8.78 per cent in the price per equated net ton (coal equivalent). Curtailment of the volume of business has occurred principally in the commodities that permit slower movement in heavier trains, and has been accompanied generally by the reduced average engine loads resulting from the movement of a greater proportion of light commodities at higher

The improvement in the unit consumption of fuel notwithstanding the handicap of the drastic reduction in the volume of traffic and the change in its character must be considered a creditable development.

Fuel Performances and Costs in Freight and Passenger Road Service, Class I Railways Per cent

J	anuary 1938		ind	
Coal per 1,000 gross	1/50	1700	1707 11	itii 175
ton-miles, lb (including loco- motive and tender)		125.0	130.0	-3.84
Fuel cost per 1,000 gross ton-miles, cents (including loco- motive and tender)	18.05	17.77	16.89	+5.21
Coal per passenger train car-miles, lb.		15.9	16.4	-3.05
Fuel cost per pas- senger train car- mile, cents Average cost of fuel	2.28	2.26	2.15	+5.12
per equated net ton (coal equiva- lent)	\$2.84	\$2.85	\$2.62	+8.78

# **Equipment and Supplies**

#### LOCOMOTIVES

THE SOUTHWEST MISSOURI has ordered two 30-ton mechanical drive gasoline locomotives from the Plymouth Locomotive Works. One of these locomotives is being placed in service between Webb City, Mo., and the Prosperity and Duenweg areas and one between Baxter Springs and Picher.

The Canadian Pacific has placed an order for 10 locomotives of the T-1-b class (2-10-4) with the Montreal Locomotive Works. These are for service on passenger trains between Calgary, Alta., and Revelstoke, B. C. They will be semistreamlined and will use oil as fuel. These are in addition to orders for 25 locomotives placed by this road, as reported in the Railway Age of March 19, page 546.

#### FREIGHT CARS

THE CHICAGO GREAT WESTERN has placed an order with the Pullman-Standard Car Manufacturing Company for repairs to 27 box and automobile cars,

THE SOUTHERN RAILWAY is asking for bids on April 30 for 5,000 freight cars, as follows:

Number	Туре	Capacity	Ft. In.
3,000	S. S. Box	40	40 6
250	S. U. Stock	40	40 0
	S. S. Furniture		50 6
1,000	H. S., D. B. Gondola		41 9
500	L. S. Gondola	. 50	41 6
25	M. T. Gondola	70	65 0
25	Flat	70	50 0

#### PASSENGER CARS

THE PULLMAN COMPANY has placed an order with the Pullman-Standard Car Manufacturing Company for the construction of Roomette Car No. 2, containing 18 rooms.

#### IRON AND STEEL

The Bessemer & Lake Erie has ordered 3,500 tons of rail from the Carnegie-Illinois Steel Corporation.

THE UNION RAILROAD has ordered 1,100 tons of rail from the Carnegie-Illinois Steel Corporation.

Long Island.—A contract has been given to the Jones & Laughlin Steel Corp., for 1,400 tons of reinforcing steel for grade crossing elimination work on this road at Lynbrook, N. Y. The Poirier & McLane Corp., New York, has the general contract for this work.

RAILWAY CONNECTIONS between greater Hong Kong and Canton, China, have been cut through destruction of the bridge over the Sheklung River by heavy Japanese aerial bombardments. Engineers estimated that 90 days will be required for repairs to the bridge.

## **Supply Trade**

#### **Alloys Development Corporation**

The Alloys Development Corporation of New York, with offices in the International Building, Rockefeller Center, New York, has been formed as a successor to the U. S. Rustless Steel & Iron Corporation. Frederick D. Foote and Dr. Beram D. Saklatwalla are associated in this enterprise. Mr. Foote, as president of the new and after conferences with engineers in the railway equipment field, became convinced of the necessity of a new steel with corrosion-resistance and weight-saving possibilities. Fortunately his study indicated a material having the properties possessed by low chromium, copper, silicon and phosphorus steel, which had been developed



Frederick D. Foote

Dr. Beram D. Saklatwalla

corporation, will devote his entire time to the development and promotion of the low-cost, weight-saving steels whose use he initiated while railroad industry executive in the commercial office of the United States Steel Corporation. The association of these two men brings together the metallurgist whose work with chromium-copper steels pointed the way to Cor-Ten, a product developed by United States Steel Corporation research, and the commercial executive of that corporation who early recognized the important role which this steel and others of its kind seemed destined to play in industry.

Doctor Saklatwalla is widely known in the steel industry for his work in reducing vanadium ores and his activities with the Vanadium Corporation of America. His research on corrosion and the material he has published on that subject, are highly regarded in the metallurgical world. One instance of this is the recognition of his work in chromium-copper corrosion-resisting steels, for which he was awarded the Grasselli Medal in 1924, the third time only that this award has been made by the Society of Chemical Industry.

The Alloys Development Corporation holds patents in many steel-producing countries, controlling a number of low chromium-copper alloys. It will be the aim of the newly organized corporation to develop and promote new materials for industrial and structural uses throughout the world. Other members of the board of directors include Edwin Hodge, Jr., president of the Pittsburgh Forgings Company, and Carl W. Ehni, vice-president of the Peoples-Pittsburgh Trust Company, both of Pittsburgh, Pa.

Mr. Foote, shortly after he joined the United States Steel Corporation in 1933 in the research laboratories of the subsidiary companies of the United States Steel Corporation. Indeed, such a steel had been under exhaustive test for a sufficient period to demonstrate its properties. As a result, U. S. S. Cor-Ten, the trade name given the new material, proved to be a pioneer of a group of superior steels now generally referred to as "high-tensile steels."

Frederick D. Foote was born in Flint, Mich., and began his business career in the inspection department of the Buick Motor Company. A year later, in 1908, he was appointed chief inspector of one of the plants of the Weston Mott Company, maker of front and rear automobile axles, since acquired by the General Motors Corporation. In 1911 he went to Detroit to engage in home designing and construction, but shortly thereafter became associated with the Greenville Steel Car Company of Greenville, Pa., at that time a maker of front and rear automobile axles. He served successively with this company as purchasing agent, secretary and treasurer, and president. His contact with the railway equipment industry started when the Greenville Steel Car Company became interested in the repair and building of steel freight cars. This company became a subsidiary of the Pittsburgh Forgings Company in 1930, and Mr. Foote was elected president of the latter company in April, 1932. In 1933 he went with the United States Steel Corporation.

Dr. B. D. Saklatwalla was born in Bombay, India, in July, 1881, and belongs to the race of Parsis of ancient Persia. He studied at the University of Bombay, obtaining the degree of bachelor of science in chemistry in 1901. Later he attended the University of Berlin, in Germany, and

the Royal Polytechnicum at Charlottenburg, from the latter of which he obtained the degree of chemical and metallurgical engineer in 1906. He was awarded the degree of doctor of engineering in 1908. In 1907 he was elected a Carnegie research scholar by the Iron and Steel Institute of Great Britain and awarded a grant for conducting research on the effect of phosphorus in steel. In 1908 Doctor Saklatwalla left Germany for the United States and in 1909 became associated with the American Vanadium Company, developing the alumino-thermic reduction process and later the electro-thermic reduction process for the smelting of vanadium ores. He became general superintendent of the American Vanadium Company and occupied the same position with its successor, the Vanadium Corporation of America, advancing to the position of senior vicepresident and director of this corporation, which he filled until October, 1935, when he formed the U. S. Rustless Steel & Iron Corporation.

F. O. Leffler, general superintendent of the North American Car Corporation, Chicago, has been appointed vicepresident, and E. C. Wood, secretary, has been appointed secretary-treasurer.

The Sullivan Machinery Company has moved its general offices from 307 North Michigan avenue, Chicago, to Michigan City, Ind., but has retained its Chicago sales office.

Harry F. Boe, commercial manager at Pittsburgh, Pa., of the Westinghouse Electric & Manufacturing Co., has been appointed manager of the service department; he succeeds W. K. Dunlap, assistant to vice-president, formerly in charge of the department, who has retired.

The Cleveland Frog & Crossing Company, Cleveland, Ohio (Lucas & Balkwill, proprietors), a partnership for many years prior to Mr. Lucas' death last April, has been changed over to a corporation and is continuing to do business as such with the same firm name, financial interests and organization.

Henry W. Collins, New York sales division manager of the Celotex Corporation, has been elected vice-president and has been succeeded by Harry W. Conway, assistant manager of that division. J. Z. Hollman, assistant general sales manager, has been promoted to general sales manager.

Curtis S. Garner, general manager of erection of the American Bridge Company, (subsidiary of the United States Steel Corporation) has been elected a director and vice-president, with his head-quarters, as formerly, at Pittsburgh, Pa. In addition to the duties involved by these new offices, he continues in full charge of erecting operations. Mr. Garner has been identified with the steel fabricating industry since 1895, and his service with the American Bridge Company dates from that time, when he entered the employ of the Milwaukee Bridge & Iron Works, which

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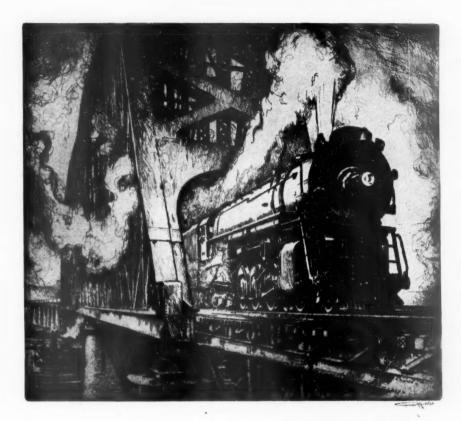
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# **POWER**

Power is what you buy in a locomotive.

Plot your power requirements for any given service, and you will find that steam best meets your needs.

Maximum power at any required speed, with unequalled flexibility in operation, may be purchased cheaper in steam than in any other form of prime mover.



LIMA LOCOMOTIVE WORKS, INCORPORATED, LIMA, OHIO

later was merged with the American Bridge Company. Mr. Garner subsequently served on assignments in the engineering, operating and contracting departments of various other American Bridge Company plants. In 1901 he was appointed assist-



Blank & Stoller

Curtis S. Garner

ant to the chief engineer of erection with office at Pencoyd, Pa. In 1914 he was promoted to manager of foreign erection, in which capacity he directly supervised field operations for many structural steel projects throughout the world. He has served since 1931 as general manager of erection.

#### TRADE PUBLICATION

GALVANIZED ROOFING.—A four-page folder describing the design, qualities and advantages of "Storm Seal" galvanized roofing, has been issued by the Carnegie-Illinois Steel Corporation, the American Steel & Wire Company, and the Columbia Steel Company, subsidiaries of the United States Steel Corporation. Illustrated by drawings, the folder also includes instructions for applying the roofing.

#### Construction

CHICAGO & NORTH WESTERN.—The State Highway Commission of Wisconsin has awarded a contract to Brennan Bros., for the construction of a subway to carry U. S. Highway No. 118 under a single-track line of the North Western near Platteville, Wis. Falsework for this structure and steel will be erected by the railroad. The subway structure will cost about \$35,000.

New Orleans, La.—New Orleans, La., is considering the construction of one or two union stations which would be financed by a bond issue which, in turn, would be supported by charges to railroads using the stations. A committee of railroad representatives is making an investigation and will report shortly to the city commissioners as to the best site or sites for the terminal or terminals. At present, 12 trunk lines use 5 stations.

#### **Financial**

ALABAMA GREAT SOUTHERN.—Annual Report.—The 1937 annual report of this company shows net income, after interest and other charges, of \$1,820,664, as compared with net income of \$1,489,121 in 1936. Selected items from the income statement follow:

	1937	1936	Increase or Decrease
Average Mileage		1930	Decrease
Operated RAILWAY OPER-	315.14	315.14	
ATING REVENUES	\$7,328,178	\$6,529,136	\$799,041
Maintenance of way	979,933	966,177	13.756
Maintenance	2,2,200	300,177	20,750
of equipment Transportation	1,636,073 2,293,834	1,436,610 2,031,207	199,463 262,626
TOTAL OPERAT-			
ING EXPENSES Operating ratio	5,330,578 72.74	4,814,549 73.74	516,028 -1.0
NET REVENUE			
FROM OPERATION Railway tax	1,997,600	1,714,587	283,013
accruals Hire of	673,845	538,176	135,669
Equipment Joint facility	*81,823	128,721	-210,544
rents	152,835	141,888	10,947
NET RAILWAY			
OPERATING INCOME Non-operating	1,252,743	905,801	346,942
income	1,063,324	1,068,837	-5,513
GROSS INCOME	2,316,068	1,974,638	341,430
Rent for leased			
roads and equipment	19,579	. 19,579	
Interest on funded debt	423,840	423,840	
NET INCOME	\$1,820,664	\$1,489,121	+\$331,543

<sup>\*</sup> Debit.

ARKANSAS & MEMPHIS RAILWAY BRIDGE & TERMINAL,-Notes,-This company has asked the Interstate Commerce Commission for authority to issue demand interest bearing notes which, when issued, will make the total amount of outstanding demand notes in excess of five per cent of the total par value of its outstanding securi-The company also seeks authority to issue similar demand interest bearing notes to the three proprietary lines (St. Louis Southwestern, Chicago, Rock Island & Pacific, and Missouri Pacific) from time to time in the future as it may become necessary for them to make advances to this company, the advances to be used for additions and betterments.

Baltimore & Ohio.—Abandonment.— The Interstate Commerce Commission, Division 4, has authorized this company to abandon the Raccoon Valley branch line of its Cumberland division extending from valuation station 0 plus 00, near Newburg, W. Va., to the end of the branch at valuation station 194 plus 66, 3.7 miles.

Abandonment. — The Interstate Commerce Commission, Division 4, has authorized this company to abandon the operation and the Quemahoning branch to abandon the line extending from Valuation station 1,100 plus 00 near Ralphton, Pa., to valuation station 1,528 plus 90, 8.12 miles.

BANGOR & AROOSTOOK. — Equipment Trust Certificates.—The Interstate Commerce Commission, Division 4, has modi-

fied its order of May 25, 1937, so as to authorize the sale of \$400,000 of this company's 2½ per cent serial equipment trust certificates, series K. The issue has been sold at 98.507 to Hornblower & Weeks and associates making the average annual cost to the company approximately 2.82 per cent.

The commission has also authorized this company to assume liability for \$1,500,000 of 2½ per cent serial equipment trust certificates, maturing in 12 equal annual installments of \$125,000 on April 1 in each of the years from 1939 to 1950. The issue has been sold at 98.96 to the Equitable Life Assurance Society of the United States, making the average annual cost to the company approximately 2.68 per cent.

Burlington-Rock Island.—Lease of the Galveston Terminal.—The Interstate Commerce Commission, Division 4, has approved a lease by this company of the properties of the Galveston Terminal.

Central of Georgia.—Annual Report.— The annual report of this company for the year ended December 31, 1937, shows net deficit, after interest and other charges, of \$2,372,809, as compared with net deficit of \$2,027,022 in 1936. Selected items from the income account follow:

			Increase
Average	1937*	1936*	Decrease
Mileage Operated RAILWAY	1,926.63	1,926.63	*****
OPERATING REVENUES	\$16,549,710	\$15,932,357	\$617,352
TOTAL OPERATING EXPENSES	14,384,376	13,292,495	1,091,881
NET REVE- NUE FROM OPERATIONS Railway tax	2,165,333	2,639,862	-474,528
accruals	1,052,802	1,137,601	-84,799
Railway operating income Equipment	1,112,531	1,502,261	-389,729
rents—Net Dr. Joint facility rents—Net Dr.	115,186 142,433	130,094	-14,907 10,070
NET RAILWAY OPERATING INCOME Non-operating income	854,911 399,549	1,239,804 397,926	-384,892 1,623
GROSS INCOME	1,254,461	1,637,730	-383,269
Rent for leased roads Interest on	403,950		11,895
funded debt	2,798,697	2,803,183	-4,485
TOTAL DEDUC- TIONS FROM GROSS INCOME	3,627,271	3,664,753	-37,482
NET DEFICIT	\$2,372,809	\$2,027,022	\$345,786

\* Combined Corporate and Receiver Accounts.

CHICAGO & NORTH WESTERN.—Reorganization.—Hearings in the reorganization proceedings of this company were resumed on April 19 and 20 before Interstate Commerce Commissioner Meyer. Both sessions were devoted to the presentation of statistical exhibits dealing with the segregation of earnings of various mortgaged lines in the North Western system.

CHICAGO & NORTH WESTERN.—Abandonment.—Examiner R. Romero of the Interstate Commerce Commission, in a proposed report to the commission, has rec2

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# THREE CONDITIONS

that modern locomotives must meet

A lower driving wheel load limit to suit high speed operation in relation to track.

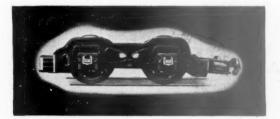
High power output to pull the train at present-day speeds.

3
Limitation of starting power
by the factor of adhesion.

These considerations have brought a new approach to the design of high-speed passenger locomotives. » » The cylinders, pressure and driving wheels have been proportioned for the work to be done at the road speeds, using as few drivers as practical. » » Leading and trailing trucks carry the remainder of the locomotive structure. » » » To restore the design to a proper balance, the deficiency in starting power is supplied by using The Locomotive

Booster to put idle trailer weight to work.

» » This insures minimum number of driving axles and minimum weight on drivers, resulting in a locomotive that is easier on track. » » »





Franklin parts fit — in applying them there is no labor cost for fitting. They are built to original dimensions of carefully selected materials — they avoid road failures and excessive maintenance.

FRANKLIN RAILWAY SUPPLY COMPANY, INC.

NEW YORK

CHICAGO

MONTREAL

ommended that it refuse to authorize the trustee to abandon that portion of the Galena branch extending from Hazel Green Junction, Ill., to Galena, 10 miles. The examiner finds that the present business does not justify the abandonment of the line, but suggests that the trustee may find it advisable to adopt seasonal operation.

CHICAGO & WESTERN INDIANA.—Annual Report.—The annual report of this company for the year ended December 31, 1937, shows net income, after interest and other charges, of \$441,117, as compared with net income of \$479,850 in 1936. Selected items from the income statement follow:

			Increase
RAILWAY	1937	1936	Decrease
Operating Revenues	\$147,194	\$123,446	\$23,748
Maintenance of way Maintenance	19,547	13,356	6,190
of equipment	42,102	55,552	-13,450
Transportation —Rail	109,325	101,247	8,077
TOTAL OPERAT- ING EXPENSES Operating ratio	180,822 122.85	180,307 146.06	515 -23.21
NET LOSS FROM OPERATIONS Railway tax	33,628	56,861	-23,232
accruals	664,206	990,663	-326,456
Net rents	2,145,827	2,781,634	-635,807
NET RAILWAY OPERATING			
INCOME Non-operating	1,447,992	1,734,110	-286,117
income	2,079,301	2,105,072	-25,770
TOTAL INCOME	3,527,294	3,839,182	-311,888
Interest on funded debt	2,996,208	3,226,449	-230,241
TOTAL FIXED CHARGES	3,025,935	3,275,919	-249,984
NET INCOME	\$441,117	\$479,850	-\$38,732

CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC. — Abandonment. — The Interstate Commerce Commission, Division 4, has authorized the trustees to abandon a branch line extending from a connection with a line of the Milwaukee at Scotland, S. Dak., to Menno, 8.9 miles.

CHICAGO, ROCK ISLAND & PACIFIC.— Abandonment.—The Interstate Commerce Commission, Division 4, has authorized the trustees to abandon a branch line extending from Evans, Iowa, to Knoxville, 20.4 miles

COLORADO & SOUTHERN.—R. F. C. Loan.
—The Interstate Commerce Commission has issued a supplemental order in Finance Docket No. 11941 so as to make it clear that the \$27,444,300 of the applicant's refunding and extension bonds, now held by the R. F. C., and \$2,000,000 of the Chicago, Burlington & Quincy's general mortgage 4 per cent bonds, pledged directly by the latter to R. F. C., shall not apply or be required as security for the loan and other obligations of the applicant proposed in this application.

CINCINNATI, NEW ORLEANS & TEXAS PACIFIC.—Annual Report.—The annual report of this company for the year ended December 31, 1937, shows net income, after interest and other charges, of \$2,262,-

588, as compared with net income of \$3,-331,340 in 1936. Selected items from the income statement follow:

	1937	1936	Increase or Decrease
RAILWAY		2,00	2000000
OPERATING REVENUES	\$16,943,744	\$16,704,683	\$239,060
Maintenance of way	2,005,319	2,037,712	-32,393
Maintenance of equipment Transportation	3,262,946 4,252,348	3,172,219 3,945,273	90,727 307,075
TOTAL OPERATING EXPENSES	10,493,906	10,058,075	435,831
Operating	10,493,906	10,038,073	433,631
ratio	61.93	60.21	1.72
NET REVENUE		4	
OPERATIONS	6,449,837	6,646,608	-196,770
Taxes Hire of	1,436,302	1,330,936	105,365
Equipment	*14,684	67,811	-82,495
Joint facility rents	153,609	311,491	-157,882
NET RAILWAY OPERATING			
INCOME Non-operating	4,874,610	4,936,368	-61,758
income	114,157	144,164	-7
GROSS INCOME	4,988,767	5,080,532	-91,765
Rent for leased roads and equipment	1,699,325	1,700,560	-1,235
TOTAL DEDUC-			
GROSS INCOME	1,726,178	1,749,192	-23,014
NET INCOME	\$3,262,588	\$3,331,340	-\$68,752

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COLORADO & SOUTHERN.—Acquisition of Fort Worth & Denver Terminal.—The Interstate Commerce Commission, Division 4, has authorized this company to acquire control of the Fort Worth & Denver Terminal by purchase of the capital stock.

COLORADO & SOUTHERN.—Bonds.—The Interstate Commerce Commission, Division 4, has authorized this company to issue \$728,000 of general mortgage 4½ per cent gold bonds, series A, to refund a like amount of first mortgage six per cent redeemable gold coupon bonds of the Fort Worth & Denver Terminal which matured December 1, 1937. The bonds will mature May 1, 1980.

EUREKA NEVADA.—Abandonment.—This road has applied to the Interstate Commerce Commission for authority to abandon its 88-mile narrow-gage (3 ft.) system extending from Palisade, Nev., to Eureka, with a branch from Eureka to Ruby Hill.

Fonda, Johnstown & Gloversville.— Abandonment.—This company and the trustees have applied to the Interstate Commerce Commission for authority to abandon certain interurban electric lines extending from Gloversville, N. Y., to Schenectady, 32.9 miles, and from Gloversville, N. Y., to Fonda, 3.3 miles.

KANSAS, OKLAHOMA & GULF.—Acquisition.—This company has applied to the Interstate Commerce Commission for authority to acquire by lease the properties of the Kansas, Oklahoma & Gulf of Texas

FONDA, JOHNSTOWN & GLOVERSVILLE.— Annual Report.—The 1937 annual report

of this road shows net deficit, after interest and other charges, of \$139,134, as compared with net deficit of \$134,062 in 1936. Selected items from the income account follow:

			Increase
	1937	1936	Decrease
RAILWAY OPERAT- ING REVENUES	\$548,369	\$565,212	-\$16 843
TOTAL OPERAT- ING EXPENSES	486,063	506,377	-20.314
NET REVENUE FROM OPERATIONS Railway tax	62,306	58,835	3.471
accruals	*48,604	38,043	10,561
Railway operat- ing income Net rents—Dr.	13,702 3,687	20,792 8,290	-7,090 -4,603
NET RAILWAY OP- ERATING INCOME Non-operating	10,015	12,502	-2.487
income	35,541	38,026	-2,485
TOTAL INCOME	45,556	50,528	-4,972
Rent for leased roads Interest on	6,600	6,600	
funded debt	137,990	138,557	-567
TOTAL FIXED CHARGES	160,623	158,217	1,406
NET DEFICIT	\$139,134	\$134,062	5,072
	-		-

\* Increase due to Carrier's contribution under Railroad Retirement Act and State and Federal Unemployment Insurance taxes.

Georgia Southern & Florida.—Annual Report.—The annual report of this company for the year ended December 31, 1937, shows net deficit, after interest and other charges, of \$53,380, as compared with net deficit of \$160,333 in 1936. Selected items from the income statement follow:

			Increase
	1937	1936	Decrease
RAILWAY OPERAT- ING REVENUES		\$2,301,546	\$106,531
Maintenance of way Maintenance	402,815	377,667	25,147
of equipment Transportation	493,468 954,357	497,997 970,992	-4,529 $-16,635$
TOTAL OPERAT- ING EXPENSES Operating	1,963,818	1,949,113	14,704
ratio	81.55	84.69	-3.14
NET REVE- NUE FROM OPERATIONS	444,259	352,433	91,826
Railway tax accruals Equipment rents Joint facility	161,027 25,674	127,528	33,498 42,854
rents	15,817	19,214	3,397
NET RAILWAY OPERATING INCOME	241,740	137,524	104,216
Non-operating income	10,198	8,047	2,151
GROSS INCOME	251,939	145,571	106,368
Interest on funded debt	293,525	293,525	
TOTAL DEDUC- TIONS FROM GROSS INCOME	305,319	305,905	-586
NET DEFICIT	\$53,380	\$160,333	-\$106,953
			-

MAINE CENTRAL.—Acquisition of Leased Roads.—Stockholders of this road at their annual meeting on April 20 authorized the board of directors to acquire by purchase the Dexter & Piscataquis and the Dexter & Newport, both roads now being under lease to the Maine Central.

MINNEAPOLIS & St. Louis.—Receivers'

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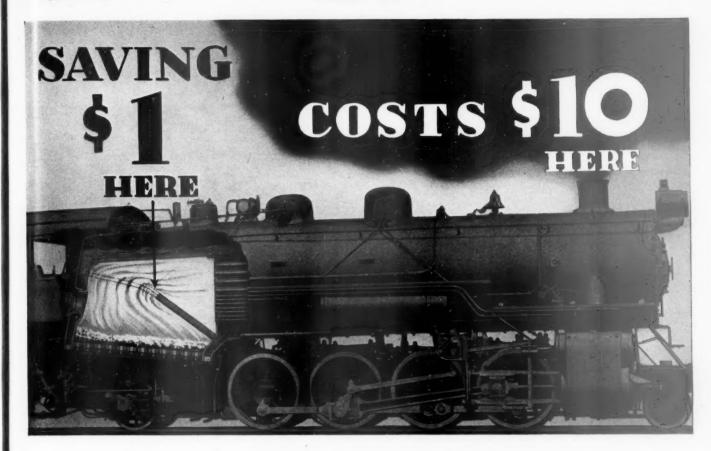
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# ... \$1.00 for arch brick pays for itself ten times

The last course of Arch brick works just as effectively as the other courses. It can be left off only at the expense of an increase in fuel consumption.

The economy of the locomotive Arch was thoroughly established years ago. More recent tests show that every dollar you "save", by cutting down on the length of Arch, costs you ten dollars in the form of increased fuel; net loss nine dollars.

For economy of operation be sure that your locomotives leave the roundhouse with a full arch with every brick in place.

THERE'S MORE TO SECURITY ARCHES THAN JUST BRICK

HARBISON-WALKER REFRACTORIES CO.

Refractory Specialists



AMERICAN ARCH CO. INCORPORATED

60 EAST 42nd STREET, NEW YORK, N. Y.

Locomotive Combustion Specialists Certificates.—The Interstate Commerce Commission, Division 4, has authorized the receivers to issue \$604,350 of receivers' certificates for the purpose of renewing or extending maturing certificates of a like amount.

MINNEAPOLIS & St. Louis.—Annual Report.—The 1937 annual report of this company shows net income, after interest and other charges, of \$478,714, as compared with net income of \$687,192 in 1936. Selected items from the income account follow:

			Increase
A	1937	1936	Decrease
Average Mileage Operated RAILWAY OPERATING	1,530.63	1,570.27	-39.64
REVENUES	\$8,660,084	\$8,955,364	-\$295,279
TOTAL OPERAT- ING EXPENSES Operating	7,123,626	7,114,353	9,273
ratio	82.26	79.44	2.82
NET REVE- NUE FROM			
OPERATIONS Railway tax	1,536,458	1,841,010	-304,552
accruals	337,437	501,816	-164,378
Railway operating income Hire of	1,199,020	1,339,194	-140,173
Equipment— Net Dr.	6\$3,360	552,266	101,093
Joint facility rents—Net Dr.	41,094	58,434	-17,339
NET RAILWAY OPERATING			
INCOME	504,565	728,492	-223,926
Non-operating income	84,810	124,724	-39,914
GROSS INCOME	589,376	853,217	-263,841
Interest on Debt and Other Deductions			
from Income	110,662	166,025	-55,363
NET INCOME	\$478,714	\$687,192	-\$208,477

New York Central.—Collateral.—This company has applied to the Interstate Commerce Commission for authority to pledge certain collateral as security for 2-year 4 per cent promissory notes on which it expects to obtain loans of \$20,000,000 from New York banks. The collateral involved would be \$6,903,000 of the road's consolidated mortgage 4 per cent bonds, series C, due February 1, 1998; \$6,000,000 of New York Central & Hudson River 3½ per cent mortgage bonds, due July 1, 1997; and \$6,-171,000 of Michigan Central 4½ per cent refunding and improvement mortgage bonds, series A, due January 1, 1947.

New York, New Haven & Hartford.—Reorganization.—The Interstate Commerce Commission, Division 4, has authorized Rufus I. Rogers, William H. Steiner, and Eugene S. Brooks to serve as a protective committee for holders of Housatonic five per cent 50 year consolidated mortgage gold bonds in the reorganization proceedings of this company.

New York, New Haven & Hartford.— Abandonment by Hartford & Connecticut Western.—The trustees of the Hartford & Connecticut Western have applied to the Interstate Commerce Commission for authority to abandon 1.2 miles of track in Hartford County, Conn. Service had previously been abandoned by the New Haven on these portions of track. NEW ORLEANS & NORTHEASTERN.—Annual Report.—The annual report of this company for the year ended December 31, 1937, shows net income, after interest and other charges of \$229,781, as compared with net income of \$44,967 in 1936. Selected items from the income statement follow:

	1937	1936	Increase or Decrease
RAILWAY OPERAT-		1930	Decrease
ING REVENUES		\$2,780,119	\$496,154
Maintenance of way Maintenance	397,499	345,057	52,441
of equipment Transportation	427,963 995,097	426,076 867,587	1,887 127,509
TOTAL OPERAT- ING EXPENSES	2,028,845	1,831,839	197,005
Operating ratio	61.93	65.89	-3.96
NET REVE- NUE FROM OPERATIONS	1,247,428	948,279	299,148
Railway tax accruals Hire of	399,346	282,000	117,345
Equipment Joint facility	374,808	377,203	-2,395
rents—Dr.	123,141	117,026	6,115
NET RAILWAY OPERATING INCOME Non-operating income	596,414 26,763	406,102 25,849	190,312
GROSS INCOME	623,177		191,226
Interest on funded debt	392,325	392,325	
TOTAL DEDUC- TIONS FROM GROSS INCOME	393,395	386,984	6,411
OROSS INCOME	0,00,000	550,764	\$184,814

NEW YORK, NEW HAVEN & HARTFORD.— Segregation of Earnings Approved.—The Interstate Commerce Commission, Division 4, has found that the trustees' method of segregation and allocation of the company's revenues and expenses between and to its various mortgaged and leased lines is as fair and equitable as the circumstances will permit and has made this recommendation to the court.

New York, Susquehanna & Western.—Reorganization Plan.—This road has filed a debtor's preliminary reorganization plan with the federal court at Newark, N. J., which calls for merger with the reorganized company of four wholly-owned subsidiaries. G. S. Hobart, counsel, recommended that trustees of the Erie, which holds a controlling stock interest in the road, be given opportunity to be heard on the plan before action by the court.

Peoria & Pekin Union.—Annual Report.—The 1937 annual report of this company shows net income, after interest and other charges, of \$45,167, as compared with net income of \$112,999 in 1936. Selected items from the income account follow:

	1937	1936	Increase or Decrease
RAILWAY OPERAT- ING REVENUES	\$1,131,795	\$1,227,798	-\$96,003
TOTAL OPERAT- ING EXPENSES	938,680	912,627	26,052
NET REVE- NUE FROM OPERATIONS Railway tax accruáls	193,115 164,221	315,171 167,988	-122,055 -3,767

Railway operat- ing income Net rents	28,894 169,396	147,182 117,967	-118,288 51,429
NET RAILWAY OPERATING INCOME	198,290	265,150	-66,859
Non-operating income	22,048	21,784	264
TOTAL INCOME	220,339	286,934	-66,595
Rent for leased roads and equipment Interest on	1,500	1,500	
funded debt	167,695	167,695	
TOTAL FIXED CHARGES	173,243	172,611	631
NET INCOME	\$45,167	\$112,999	-\$67,831

St. Louis-San Francisco.—Reorganization.—The Interstate Commerce Commission, Division 4, has postponed from May 3, to November 1, the date for the next public hearing in the reorganization proceedings of this company.

Southern.—Annual Report.—The annual report of this company for the year ended December 31, 1937, shows net income, after interest and other charges, of \$805,921, as compared with net income of \$4,304,926 in 1936. Selected items from the income statement follow:

RAILWAY	1937	1936	Increase or Decrease
OPERATING REVENUES	\$98,435,413	\$96,274,498	\$2,160,915
Maintenance of way Maintenance	12,102,996	11,273,741	829,254
of equipment Transportatio	19,165,556 n 34,881,427	17,437,664 33,266,297	1,727,892 1,615,129
TOTAL OPERATING EXPENSES Operating	71,811,203	67,416,700	4,394,502
ratio	72.95	70.03	2.92
NET REVE- NUE FROM OPERATIONS	26,624,209	28,857,797	-2,233,588
Railway tax accruals Hire of	7,069,947	5,892,303	1,177,644
Equipment Joint facil-	3,452,026	2,731,945	720,081
ity rents	989,989	935,274	54,715
NET RAILWAY OPERATING			
INCOME Non-operat-	15,112,245	19,298,272	-4,186,027
ing income	2,381,780	2,012,423	369,357
GROSS INCOME	17,494,026	21,310,696	-3,816,670
Rent for leased roads and			
equipment	2,588,280	2,548,180	40,100
Interest on funded debt	13,180,666	13,236,637	-55,971
NET INCOME	\$805,921	\$4,304,926	-\$3,499,005

SOUTHERN PACIFIC.—R. F. C. Loan.— The Interstate Commerce Commission, Division 4, has approved an R. F. C. loan of \$14,000,000 to the Southern Pacific for a period of three years at four per cent.

#### Dividends Declared

Atlantic Coast Line.—Preferred, \$2.50, semiannually, payable May 10 to holders of record April 22.

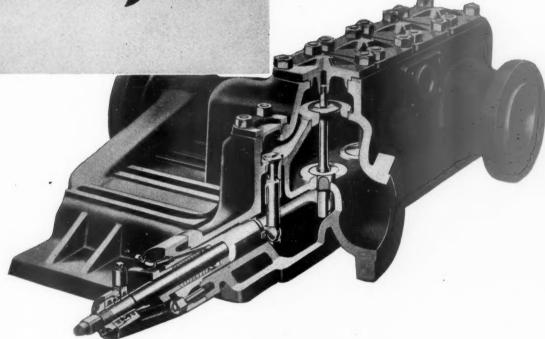
#### Average Prices of Stocks and Bonds

4 5	Apr. 19	Last week	Last
Average price of 20 repre- sentative railway stocks	22.61	24.81	59.02
Average price of 20 repre- sentative railway bonds	54.49	55.25	82.74

Small Steel

Valves Do Not

Warp and Leak



The small steel valves of the American multiple-valve throttle insure a DEPENDABLE throttle.

New locomotives are predominately equipped with the American multiplevalve throttle.



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A-1219 THE SUPERHEATER COMPANY

Representative of AMERICAN THROTTLE COMPANY, INC.
60 East 42nd Street, NEW YORK
Canada: THE SUPERHEATER COMPANY, LTD., MONTREAL

Superheaters - Exhaust Steam Injectors - Feed Water Heaters - American Throttles - Pyrometers - Steam Dryers

# Railway Officers

#### EXECUTIVE

C. W. Galloway, vice-president of the Monongahela, with headquarters at Baltimore, Md., has been elected president, with the same headquarters.

R. W. Clark, general traffic manager of the Northern Pacific, has been appointed to the newly-created position of vice-president in charge of traffic, with headquarters as before at St. Paul, Minn.

At a meeting of the board of directors of the Detroit Terminal Railroad Company, C. G. Bowker, vice-president, was elected president for the ensuing year to succeed J. L. McKee, who, in turn, becomes vice-president, succeeding Mr. Bowker. The latter is vice-president and general manager of the Grand Trunk Western and Mr. McKee is assistant vice-president and general manager of the Michigan Central.

Edward A. Dougherty, assistant chief engineer of the New York Central, with headquarters at New York, has been appointed assistant to the vice-president of the New York Central System, with headquarters at Chicago. Mr. Dougherty will take over the duties of Ralph A. Feldes, who held this position on the Chicago River & Indiana and the Indiana Harbor Belt, and whose death on March 11 was reported in the Railway Age of March 19. Mr. Dougherty entered the service of the New York Central as a chainman in the engineering department on June 15, 1906, and worked during the summer vacations of 1906-1909 while attending the School of Mines, Columbia University, from which he was graduated as a civil engineer in 1910. From 1910 to 1917 he served in the engineering department in various positions from chainman to assistant engineer and during this period worked on the electrification of the New York Central between Mott Haven, N. Y., and Croton-on-Hudson, N. Y., and also on third and fourth tracking at various points. From 1917 to 1919 Mr. Dougherty served in the valuation department as assistant engineer and from 1919 to 1923 assistant engineer in the office of the corporate chief engineer and assistant to the president and from 1923 to February 1, 1926, in the office of the assistant vice-president and vice-president of operation. On February 1, 1927, he was appointed designing engineer in the office of the chief engineer of the lines East of Buffalo, which position he held until May 1, 1935, when he was appointed assistant chief engineer there, the position he held until his recent appointment as assistant to vice-president at

# FINANCIAL, LEGAL AND ACCOUNTING

W. E. Holt, assistant to the Western land agent of the Northern Pacific, with headquarters at Seattle, Wash., has been

appointed Western land agent to succeed George H. Plummer, who has retired after serving with that company since 1895, when he became a land commissioner in Tacoma, Wash.

John J. Jenkins, who has been appointed treasurer of the Baltimore & Ohio with headquarters at Baltimore, Md., as announced in the *Railway Age* of March 26, was born on November 21, 1881, at Baltimore. He entered railroad service on December 26, 1899, with the Baltimore &



John J. Jenkins

Ohio, as clerk in the freight claim department. In May, 1900, Mr. Jenkins was transferred to the treasury department and on June 1, 1915, was apponted chief clerk in that department. On March 1, 1928, he became assistant to treasurer and on October 1, 1935, assistant treasurer, the position he held until his recent appointment as treasurer.

#### **OPERATING**

Frank H. Allard, who has been connected with the staff of the chief operating officer of the Chicago, Milwaukee, St. Paul & Pacific, has been appointed assistant to the chief operating officer, with headquarters at Chicago, to succeed Cyrus M. Dukes, who has retired. Mr. Allard will have jurisdiction over employee organization working agreements.

E. E. McDaniels, supervisor of service of the Western region of the Pennsylvania, with headquarters at St. Louis, Mo., on April 1 was appointed also assistant trainmaster of the St. Louis division, with headquarters at Rose Lake, Ill., succeeding R. L. Agnew, who has been transferred to the Chicago Terminal division with headquarters at Chicago. Mr. Agnew succeeds A. B. Orrviller, who has retired.

R. E. Ryan, general superintendent of the Minneapolis & St. Louis, has been promoted to the newly-created position of assistant general manager, with headquarters as before at Minneapolis, Minn. E. E. Hamilton, special representative in the operating department at Minneapolis, has been promoted to general superintendent with the same headquarters, to succeed Mr. Ryan. E. L. Crimmen, assistant superintendent of the Eastern division, with head-

quarters at Oskaloosa, Iowa, has been promoted to the newly-created position of assistant general superintendent with the same headquarters, and A. A. Fox, trainmaster of the Central and Western divisions, has been promoted to the newly-created position of assistant superintendent of these divisions, with headquarters as before at Ft. Dodge, Iowa.

E. C. Manson, who has been appointed assistant general manager of the South-Central district of the Union Pacific, as reported in the Railway Age of April 9, was born in Ohio on January 21, 1865. At the age of 14 he began railway service with the Norfolk & Western, serving on this and other eastern roads as operator, agent and dispatcher until 1887, when he entered the employ of the Union Pacific, holding successively the positions of dispatcher, chief dispatcher and trainmaster. From 1895 to 1897, he was superintendent on the International-Great Northern, then becoming chief dispatcher for the Oregon Short Line (now part of the Union Pacific), and advancing to division superintendent in 1899. He filled a similar capacity on the Southern Pacific during the period from 1905 to 1910, and then returned to the O. S. L. as general superintendent, becoming superintendent of telegraph and transportation in 1914. For brief periods during 1917 and 1918, Mr. Manson was superintendent of transportation for the U. P. System and train rules examiner for the O. S. L. During the war he served as an inspector for the Division of Operation. U. S. Railroad Administration, returning in 1920 to the O. S. L. as division superintendent. He was appointed assistant to the general manager of the South-Central district of the U. P. in 1936, and from this position he has been promoted to assistant general manager of the same district, with headquarters at Salt Lake City, Utah.

#### TRAFFIC

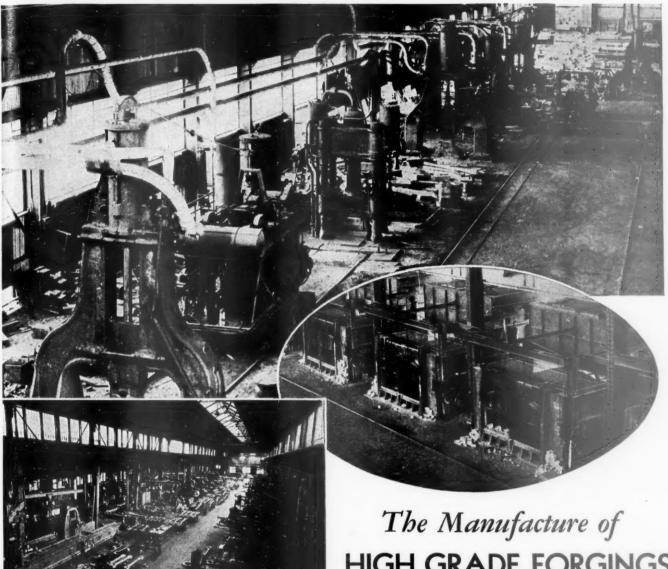
James W. Lee, who has been connected with the traffic department of the Baltimore & Ohio, has been appointed to the newly-created position of foreign freight traffic manager of the St. Louis-San Francisco, with tentative headquarters at New York.

Harry B. Burchinal, general passenger agent of the Pennsylvania-Reading Seashore Lines, with headquarters at Camden, N. J., has been appointed division passenger agent of the Pennsylvania, with headquarters at Columbus, Ohio, to succeed F. E. Penn, Jr., who has been assigned to other duties.

Benjamin D. Rhodes, division freight agent on the Pennsylvania, with headquarters at Indianapolis, Ind., has been promoted to assistant general freight agent at St. Louis, Mo., effective May 1, to succeed Chester E. Clapp, who will retire from active service after almost 46 years of service with the Pennsylvania.

E. W. Saville, division freight agent of the Pennsylvania, with headquarters at Youngstown, Ohio, has been transferred in

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HIGH GRADE FORGINGS Requires

# LARGE CAPITAL INVESTMENTS

THERE should be little or no need for any railway to make large capital investments in shops, modern equipment and new precision machinery to manufacture forgings.

Because—First, if a railroad should make any such investment their manufacturing unit costs would be prohibitively high because output would be relatively low.

Secondly, such capital investments are unnecessary because Alco shops which are manned by a thoroughly experienced personnel are already fully equipped, always kept at top-notch efficiency throughout, modern in every respect with sufficient output to keep costs relatively low. As a result Alco's complete forging service not only assures the highest quality forgings but

enables railroads to use available capital for more productive purposes.

ERICAN LOCOMOTIVE COMPANY 30 (HURCH STREET-NEW YORK-N-Y the same capacity to the central region, with headquarters at Pittsburgh, Pa., succeeding H. H. Gray, whose retirement was reported in the Railway Age of April 16. K. M. Potter, chief clerk in the division freight office at Cleveland, Ohio, has been promoted to district freight agent at Akron, Ohio, succeeding F. B. Vandegrift, who has been promoted to general southern freight agent at Atlanta, Ga. Irvin T. Marine, division freight agent at Cincinnati, Ohio, has been transferred in the same capacity to Youngstown, succeeding Mr. Saville.

H. W. Ward, traffic manager of the Minneapolis & St. Louis, has been appointed to the newly-created position of general traffic manager, with headquarters as before at Minneapolis, Minn., to have jurisdiction over all freight and passenger traffic matters and industrial de-



E. G. Gustafson

velopment. E. G. Gustafson, assistant traffic manager, with headquarters at Chicago, has been made assistant general traffic manager with the same headquarters. Three new assistant traffic managers have been appointed: L. S. Nichols, general freight agent at Minneapolis, has been appointed assistant traffic manager in charge of rates and divisions at that point; J. B. Helwig, assistant general freight agent at Los Angeles, Cal., has been appointed assistant traffic manager at that point; and R. W. Nelson, general agent at New York, has been made assistant traffic manager at the same place. O. M. Sandahl, assistant general freight agent at Minneapolis, has been appointed general freight agent, solicitation, with the same head-quarters, and C. L. Fuller, general agent at Minneapolis, has been promoted to assistant general freight agent there to succeed Mr. Sandahl.

Mr. Gustafson was born at Aurora, Ill., on July 21, 1891, and entered the service of the M. & St. L. in August, 1914, as chief clerk in the Chicago office. He was advanced to traveling freight agent three years later, and was made general agent at Cleveland, Ohio, in 1920. In 1926, he was transferred to Chicago, and in February, 1935, he was promoted to assistant general freight agent at that point. He has been assistant traffic manager at Chicago since September, 1936.

#### **ENGINEERING AND SIGNALING**

A. F. Blaess, chief engineer of the Illinois Central, with headquarters at Chicago, will retire from active service on May 1 at the age of 67 years, after 41 years of service with this company.

F. J. Ackerman, chief engineer of the Kansas City Terminal, has been appointed general manager in charge of operation and engineering and the position of chief engineer has been abolished. In his new capacity Mr. Ackerman succeeds to a portion of the duties formerly discharged by P. J. Watson, Jr., president and general manager, who has resigned to become president of the Terminal Railroad Association of St. Louis, as reported in the Railway Age of March 19. As announced in the same issue, Bernard J. Duffy succeeds Mr. Watson as president.

John M. Doorly, engineer of the New York Terminal district of the New York Central, has been appointed assistant chief engineer (Buffalo and East), with headquarters at New York, succeeding E. A. Dougherty, promoted. Alfred D. Wolff, Jr., assistant engineer, New York Terminal district, has been appointed designing engineer, with headquarters at New York. Mr. Doorly entered the service of the New York Central on May 15, 1905, as a drafts-man on the West Side Improvements at New York and on November 1, 1906, became assistant engineer. On January 1, 1914, he was appointed assistant engineer on the West Side Improvements and on January 1, 1927, Mr. Doorly was appointed engineer of the New York Terminal district, the position he held until his recent appointment as assistant chief engineer (Buffalo and East).

Mr. Wolff entered the service of the New York Central as a draftsman in the engineering department at New York on June 3, 1910, and became assistant engineer on January 1, 1912, and resident engineer at Poughkeepsie on April 16, 1916. On December 16, 1916, Mr. Wolff became assistant district engineer, Hudson River Connecting road, on the Castleton bridge cut-off. From 1918 to 1922 he was assistant district engineer and assistant engineer at Albany and, from 1922 to 1926, assistant engineer in charge of valuation order No. 3 work, Buffalo and East, at New York. In 1926 Mr. Wolff became assistant engineer, New York Terminal district on West Side improvements, the position he held until his recent appointment as designing engineer.

#### MECHANICAL

C. G. Peterson, superintendent of organization of the Railway Express Agency, reporting to the president, has been appointed chief engineer, with headquarters at New York. Mr. Peterson was graduated from Cornell University with the degree of mechanical engineer and later was commissioned in the U. S. Navy, where he was assigned to engineering duties as lieutenant-commander. He resigned his commission in June, 1920, to go with the Wright Aeronautical Corporation to take charge of construction of experimental airplanes, sale

of engines and administration of the original Wright patents, and later was president of the Wright Flying Company. During an earlier connection as engineer for the Grisscom-Russell Company, Mr. Peterson designed and built the refuse disposal plants at Toronto, Ont., Pittsburgh, Pa., and other cities and during his engineer



C. G. Peterson

neering career has enjoyed experience in refrigeration, power plant and construction equipment. He was closely connected with the development of multi-engined airplanes for airline service and after an extended European inspection tour became convinced of the advantages of all-metal instead of wood or fabric for transport planes and an advocate thereof. Until cessation of their aviation activity, he was sales manager of the airplane division of the Ford Motor Company. Later he became vice-president and general manager of the Martz Airline, a pioneer route between Buffalo and New York. Called upon for expert testimony before a Congressional committee studying the advantage of extending air mail operation under contract, Mr. Peterson made the first complete survey of topography and average weather between New York and Chicago, with cost data for operation. He first joined the staff of the president of the Railway Express Agency in January, 1934, and since that time has assisted in executing many innovations in air and rail services and in expediting the handling of traffic generally.

#### PURCHASES AND STORES

M. W. Farrell has been appointed division storekeeper of the Saratoga and Champlain divisions of the Delaware & Hudson, with headquarters at Colonie, N. Y., succeeding O. J. Lapaugh, who has been assigned to other duties. C. I. Caswell, division storekeeper at Plattsburg, N. Y., has been appointed assistant division storekeeper, Saratoga and Champlain divisions, with headquarters at Colonie. The office of division storekeeper, Champlain division, has been abolished.

#### OBITUARY

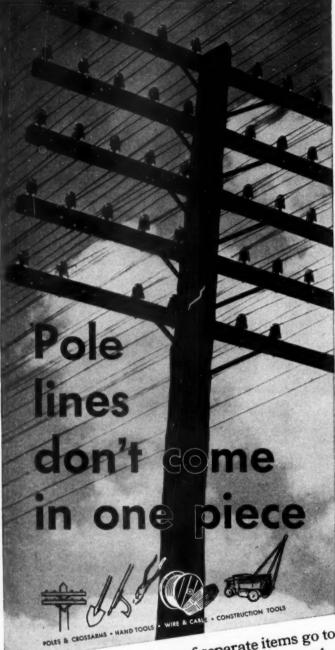
W. I. Dixon, supervisor of materials and standardization of the Missouri Pacific Lines, with headquarters at St. Louis, Mo., died of heart failure on March 26.

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## FORTIETH ANNUAL REPORT OF READING COMPANY

FOR THE YEAR ENDED DECEMBER 31, 1937

FOR THE					
PHILADELPHIA, PA., MARC	сн 22, 1938.	Other equipment rents— Joint facility rents—Net	Net	125,981.02 32,776.64	\$4,647.14 \$76,383.09
To the Stockholders of Reading Company:  The Board of Directors submits herewith its		TOTAL OTHER OPERATI NET RAILWAY OPERATING I	NG INCOME	\$686,738.31 \$13,856,834.98	\$488,001.23 \$13,944,785.02
Report of the operations and affairs of the Conyear ended December 31, 1937:	ipany for the	Nonoperating Income: Miscellaneous rent incom Miscellaneous nonoperatin	e	\$610,514.90	\$458,774.02
INCOME ACCOUNT		property		235,144.07	211,499.39
For Years Ended December 31, 1937 and 1	936	Separately operated prop Dividend income	erties-Profit	16,310.53 433,525.76	11,197.95 423,397.93
RAILWAY OPERATING REVENUES: 1937	1936	Income from funded secu- Income from unfunded	trities	830,824.77	877,108.26
Freight: Anthracite Coal:		accounts Income from sinking and		164,930.79	144,337.41
Prepared	\$15,181,106.19 651,178.09	funds		28,435.60	28,288.67
Bituminous Coal 11,066,620,38 Merchandise 27,681,233.95	10,678,677.63			12,499.01	12,479.91
Passenger	3,893,133.02	Total Nonoperating		\$2,332,185.43	\$2,167,083.54
Parlor and chair car	5,127.57	GROSS INCOME DEDUCTIONS FROM GROSS IN		\$16,189,020.41	\$16,111,868.56
Mail	454.579.18	Rent for leased roads . Miscellaneous rents		\$3,250,518.75 137,988.74	\$3,255,779.56 137,850.09
Other passenger train	33,229.92	Miscellaneous tax accrus Interest on funded debt.	als	168,941.66 5,187,820.52	169,144.86
Switching         337,491.99           All other transportation         237,599.42	321,450.71 250,627.66	Interest on unfunded del	t	16,621.79	5,408,648.80 19,316.30
Incidental and joint facility	989,605.80	Amortization of discount Miscellaneous income cha	arges	7,210.29 580,573.13	7,370.85 598,686.92
Total Railway Operating Revenues \$58,754,350.63	\$59,291,757.70	TOTAL DEDUCTIONS FI			
RAILWAY OPERATING EXPENSES: Maintenance of way and structures \$4,685,887.55	\$4,469,125.08	COME		\$9,349,674.88	\$9,596,797.38
Maintenance of equipment	10,243,412.31	NET INCOME		\$6,839,345.53	\$6,515,071.18
Transportation 22,916,413.69	22,185,755.86	Income applied to sink	ing and other	611 044 00	044 400 00
Miscellaneous operations         240,341.67           *General expenses         1,966,277.71           Transportation for investment—Cr.         3,864.92	2,503,825.97	reserve funds		\$11,044.00	\$44,402.00
		INCOME BALANCE TRANSFER		\$6,828,301.53	\$6,470,669.18
Total Railway Operating Expenses \$41,467,933.87	\$40,518,205.09	* General expenses declin	ned \$537,548, or	r 21%, due pri	incipally to the
Ratio of operating expenses to operating revenues	68.34	fact that the Federal Government of the Company un	ernment took or ider the provision	ver on June 1, ons of the Railr	1937, all pen-
Net Revenue from Railway Operations \$17,286,416.76 † Railway tax accruals	\$18,773,552.61 5,316,768.82	Act. † The principal reasons f	or the reduction	in Railway Ta	x Accruals are
RAILWAY OPERATING INCOME \$13,170,096.67	\$13,456,783.79	a credit adjustment in 1937 accrued at 3½% from M Federal and State Income	cancelling Railr	oad Retirement	tax of \$747,000
Other Operating Income:		Federal and State Income come in 1937.	taxes as the re-	sult of reduced	taxable net in-
Hire of freight cars—Net \$527,980.65	\$479,737.18	‡ Debit.			
GENERAL	BALANCE SH	EET, DECEMBER 31, 1937	,		
INVESTMENTS: ASSETS		STOCK:	LIABILITIE	S	
	0200 211 210 44			TT-13 become from	
Investment in road and equipment	\$309,311,310.44		Book Liability	Held by or for	
Improvements on leased railway property  Deposits in lieu of mortgaged property sold:	48,121,525.18	First preferred	Book Liability \$28,000,000.00	\$8,800.00	\$27,991,200.00
Improvements on leased railway property	48,121,525.18	First preferred Second preferred Common	Book Liability \$28,000,000.00 42,000,000.00 70,000,000.00	Company	\$27,991,200.00 41,970,650.00 69,989,100.00
Improvements on leased railway property  Deposits in lieu of mortgaged property sold:  Cash \$13.273.40	48,121,525.18	Second preferred Common Total Stock	\$28,000,000.00 42,000,000.00 70,000,000.00	Company \$8,800.00 29,350.00 10,900.00	41,970,650.00
Improvements on leased railway property.	48,121,525.18 923,699.15	Second preferred Common  Total Stock Long-Term Debt: Funded debt secured by	\$28,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00	41,970,650.00 69,989,100.00 \$139,950,950.00
Improvements on leased railway property.  Deposits in lieu of mortgaged property sold: Cash	48,121,525.18 923,699.15	Second preferred Common  Total Stock Long-Term Debr: Funded debt secured by mortgage	\$28,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00	41,970,650.00 69,989,100.00 \$139,950,950.00
Improvements on leased railway property.  Deposits in lieu of mortgaged property sold: Cash	923,699.15 12,404,466.25 \$370,761,001.02	Second preferred Common  Total Stock  Long-Term Debt: Funded debt secured by mortgage  Funded debt secured by stock collateral	\$28,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00	41,970,650.00 69,989,100.00 \$139,950,950.00
Improvements on leased railway property.  Deposits in lieu of mortgaged property sold: Cash	923,699.15 12,404,466.25 \$370,761,001.02 \$46,016,579.18	Second preferred Common  Total Stock  Long-Term Debt: Funded debt secured by mortgage Funded debt secured by stock collateral Equipment trust obliga- tions	\$28,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00 \$112,202,433.77	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00	41,970,650.00 69,989,100.00 \$139,950,950.00 \$99,940,533.77
Improvements on leased railway property.  Deposits in lieu of mortgaged property sold: Cash	923,699.15 12,404,466.25 \$370,761,001.02 \$46,016,579.18 12,327,302.06 2,000,000.00	Second preferred Common  Total Stock  Long-Term Debr: Funded debt secured by mortgage Funded debt secured by stock collateral Equipment trust obliga-	\$28,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00 \$112,202,433.77 24,295,000.00	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00	\$139,950,950.00 \$139,950,950.00 \$99,940,533.77 22,658,000.00
Improvements on leased railway property.  Deposits in lieu of mortgaged property sold: Cash	923,699.15 12,404,466.25 \$370,761,001.02 \$46,016,579.18 12,327,302.06 2,000,000.00	Second preferred Common  Total Stock  Long-Term Debt: Funded debt secured by mortgage Funded debt secured by stock collateral Equipment trust obliga- tions  Miscellaneous equipment obligations  Total Long - Term	\$28,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00 \$112,202,433.77 24,295,000.00 3,719,000.00 589,400.00	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00 \$12,261,900.00 1,637,000.00	41,970,650.00 69,989,100.00 \$139,950,950.00 \$99,940,533.77 22,658,000.00 3,719,000.00 589,400.00
Improvements on leased railway property.  Deposits in lieu of mortgaged property sold: Cash \$2,599,025.75  Less company's securities 1,688,600.00 910,425.75  Miscellaneous physical property.  Investments in Affiliated Companies: Stocks Bonds Notes Advances  Other Investments:	\$23,699.15 12,404,466.25 \$370,761,001.02 \$46,016,579.18 12,327,302.06 2,000,000.00 6,505,648.83 \$66,849,530.07	Second preferred Common  Total Stock  Long-Term Debt: Funded debt secured by mortgage Funded debt secured by stock collateral  Equipment trust obliga- tions  Miscellaneous equipment obligations  Total Long - Term Debt  Grants in aid of constru	\$28,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00 \$112,202,433.77 24,295,000.00 3,719,000.00 589,400.00 \$140,805,833.77	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00 \$12,261,900.00 1,637,000.00	41,970,650.00 69,989,100.00 \$139,950,950.00 \$99,940,533.77 22,658,000.00 3,719,000.00 589,400.00
Improvements on leased railway property.  Deposits in lieu of mortgaged property sold: Cash \$2,599,025.75  Less company's securities 1,688,600.00 910,425.75  Miscellaneous physical property.  Investments in Affiliated Companies: Stocks Bonds Notes Advances  Other Investments: Stocks Bonds  Other Investments: Stocks Bonds	\$23,699.15 12,404,466.25 \$370,761,001.02 \$46,016,579.18 12,327,302.06 2,000,000.00 6,505,648.83 \$66,849,530.07 \$5,343,344.05 5,771,584.10	Second preferred Common  Total Stock  Long-Term Debt: Funded debt secured by mortgage Funded debt secured by stock collateral Equipment trust obliga- tions  Miscellaneous equipment obligations  Total Long - Term Debt  Grants in aid of construc Current Liabilities: Traffic and car-service ba	\$28,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00 \$112,202,433.77 24,295,000.00 3,719,000.00 589,400.00 \$140,805,833.77 ction	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00 \$12,261,900.00 1,637,000.00 \$13,898,900.00	41,970,650.00 69,989,100.00 \$139,950,950.00 \$99,940,533.77 22,658,000.00 3,719,000.00 589,400.00
Improvements on leased railway property.  Deposits in lieu of mortgaged property sold: Cash	923,699.15 12,404,466.25 \$370,761,001.02 \$46,016,579.18 12,327,302.06 2,000,000.00 6,505,648.83 \$66,849,530.07 \$5,343,344.05 5,771,584.10 491,883.43	Second preferred Common  Total Stock  Long-Term Debt: Funded debt secured by mortgage Funded debt secured by stock collateral Equipment trust obliga- tions  Miscellaneous equipment obligations  Total Long - Term Debt  Grants in aid of constructurent Liabilities: Traffic and car-service ba Audited accounts and wa	\$28,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00 \$112,202,433.77 24,295,000.00 3,719,000.00 589,400.00 \$140,805,833.77 cion	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00 \$12,261,900.00 1,637,000.00 \$13,898,900.00	41,970,650.00 69,989,100.00 \$139,950,950.00 \$99,940,533.77 22,658,000.00 3,719,000.00 589,400.00 \$126,906,933.77 \$1,894,138.38 \$1,860,163.70 3,523,521.92
Improvements on leased railway property.  Deposits in lieu of mortgaged property sold: Cash	923,699.15 12,404,466.25 \$370,761,001.02 \$46,016,579.18 12,327,302.06 2,000,000.00 6,505,648.83 \$66,849,530.07 \$5,343,344.05 5,771,584.10 491,883.43	Second preferred Common  Total Stock  Long-Term Debt: Funded debt secured by mortgage Funded debt secured by stock collateral  Equipment trust obliga- tions  Miscellaneous equipment obligations  Total Long Term Debt  Grants in aid of constructurent Liabilities: Traffic and car-service ba Audited accounts and wa Miscellaneous accounts ya Interest matured unpaid.	\$28,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00 \$112,202,433.77 24,295,000.00 3,719,000.00 589,400.00 \$140,805,833.77 ction lances payable	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00 \$12,261,900.00 1,637,000.00 \$13,898,900.00	41,970,650.00 69,989,100.00 \$139,950,950.00 \$99,940,533.77 22,658,000.00 3,719,000.00 589,400.00 \$126,906,933.77 \$1,894,138.38 \$1,860,163.70 3,523,521,92 260,177.65 1,740,781.75
Improvements on leased railway property.  Deposits in lieu of mortgaged property sold: Cash	\$23,699.15 12,404,466.25 \$370,761,001.02 \$46,016,579.18 12,327,302.06 2,000,000.00 6,505,648.83 \$66,849,530.07 \$5,343,344.05 5,771,584.10 491,883.43 278,981.41 \$11,885,792.99	Second preferred Common  Total Stock  Long-Term Debt: Funded debt secured by mortgage Funded debt secured by stock collateral Equipment trust obliga- tions  Miscellaneous equipment obligations  Total Long Term Debt  Grants in aid of constructurent Liabilities: Traffic and car-service ba Audited accounts and we Miscellaneous accounts pr Interest matured unpaid. Dividends matured unpaid Unmatured dividends dec	\$28,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00 \$112,202,433.77 24,295,000.00 3,719,000.00 \$140,805,833.77 ction	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00 \$12,261,900.00 1,637,000.00 \$13,898,900.00	41,970,650.00 69,989,100.00 \$139,950,950.00 \$99,940,533.77 22,658,000.00 3,719,000.00 589,400.00 \$126,906,933.77 \$1,894,138.38 \$1,860,163.70 3,523,521,92 260,177.65 1,740,781.75 6,822.74 1,119,597.50
Improvements on leased railway property.  Deposits in lieu of mortgaged property sold: Cash \$2,599,025.75  Less company's securities 1,688,600.00 910,425.75  Miscellaneous physical property.  Investments in Affiliated Companies: Stocks Bonds Notes Advances  Other Investments: Stocks Bonds Advances Miscellaneous  Total Investments  Current Assets: Cash	\$23,699.15 12,404,466.25 \$370,761,001.02 \$46,016,579.18 12,327,302.06 2,000,000.00 6,505,648.83 \$66,849,530.07 \$5,343,344.05 5,771,584.10 491,883.43 278,981.41 \$11,885,792.99 \$449,496,324.08 \$2,250,367.31	Second preferred Common	\$28,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00 \$112,202,433.77 24,295,000.00 3,719,000.00 \$140,805,833.77 ction	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00 \$12,261,900.00 1,637,000.00 \$13,898,900.00	41,970,650.00 69,989,100.00 \$139,950,950.00 \$99,940,533.77 22,658,000.00 3,719,000.00 589,400.00 \$126,906,933.77 \$1,894,138.38 \$1,860,163.70 3,523,521.92 260,177.65 1,740,781.75 1,740,781.75 1,119,597.50 419,013.30 328,625.65
Improvements on leased railway property.  Deposits in lieu of mortgaged property sold: Cash \$2,599,025.75  Less company's securities 1,688,600.00 910,425.75  Miscellaneous physical property.  Investments in Affiliated Companies: Stocks Bonds Notes Advances  Other Investments: Stocks Bonds Advances Miscellaneous  Total Investments  Current Assets: Cash Special deposits Special deposits Loans and bills receivable.	\$23,699.15 12,404,466.25 \$370,761,001.02 \$46,016,579.18 12,327,302.06 2,000,000.00 6,505,648.83 \$66,849,530.07 \$5,343,344.05 5,771,584.10 491,883.43 278,981.41 \$11,885,792.99 \$449,496,324.08 \$2,250,367.31 41,440.35 64,687.96	Second preferred Common  Total Stock  Long-Term Debt: Funded debt secured by mortgage Funded debt secured by stock collateral Equipment trust obliga- tions  Miscellaneous equipment obligations  Total Long-Term Debt  Grants in aid of construc Current Liabilities: Traffic and car-service ba Audited accounts and wa Miscellaneous accounts pa Interest matured unpaid Dividends matured unpaid Unmatured dividends dec Unmatured interest accrued Other current liabilities.	\$28,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00 \$112,202,433.77 24,295,000.00 3,719,000.00 \$140,805,833.77 etion. lances payable lared need lared lared lared	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00 \$12,261,900.00 1,637,000.00 \$13,898,900.00	41,970,650.00 69,989,100.00 \$139,950,950.00 \$99,940,533.77 22,658,000.00 3,719,000.00 589,400.00 \$126,906,933.77 \$1,894,138.38 \$1,860,163.70 3,523,521,92 260,177.65 1,740,781.75 1,740,781.75 1,740,781.75 1,19,597.50 419,013.30 328,625.65 1,040,335.94
Improvements on leased railway property.  Deposits in lieu of mortgaged property sold: Cash	923,699.15 12,404,466.25 \$370,761,001.02 \$46,016,579.18 12,327,302.06 2,000,000.00 6,505,648.83 \$66,849,530.07 \$5,343,344.05 5,771,584.10 491,883.43 278,981.41 \$11,885,792.99 \$449,496,324.08 \$2,250,367.31 41,440.35 64,687.96 1,028,849.23	Second preferred Common	\$28,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00 \$112,202,433.77 24,295,000.00 3,719,000.00 \$140,805,833.77 etion. lances payable lared need lared lared lared	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00 \$12,261,900.00 1,637,000.00 \$13,898,900.00	41,970,650.00 69,989,100.00 \$139,950,950.00 \$99,940,533.77 22,658,000.00 3,719,000.00 589,400.00 \$126,906,933.77 \$1,894,138.38 \$1,860,163.70 3,523,521,92 260,177.65 1,740,781.75 6,822.74 1,119,597.50 419,013.30 328,625.65 1,040,335.94
Improvements on leased railway property.  Deposits in lieu of mortgaged property sold:  Cash \$2,599,025.75  Less company's securities 1,688,600.00 910,425.75  Miscellaneous physical property.  Investments in Affiliated Companies:  Stocks  Bonds  Notes  Advances  OTHER INVESTMENTS:  Stocks  Bonds  Advances  Miscellaneous  Total Investments  Current Assets: Cash  Special deposits  Loans and bills receivable.  Traffic and car-service balances receivable. Net balance receivable from agents and conductors.  Miscellaneous	\$23,699.15 12,404,466.25 \$370,761,001.02 \$46,016,579.18 12,327,302.06 2,000,000.00 6,505,648.83 \$66,849,530.07 \$5,343,344.05 5,771,584.10 491,883.43 278,981.41 \$11,885,792.99 \$449,496,324.08 \$2,250,367.31 41,440.35 64,687.96 1,028,849.23 808,642.42 1,871,861.66	Second preferred Common	\$28,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00 \$112,202,433.77 24,295,000.00 3,719,000.00 589,400.00 \$140,805,833.77 ction. llances payable lances payable lanced aed lared lared lared lities	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00 \$12,261,900.00 1,637,000.00 \$13,898,900.00	41,970,650.00 69,989,100.00 \$139,950,950.00 \$99,940,533.77 22,658,000.00 3,719,000.00 589,400.00 \$126,906,933.77 \$1,894,138.38 \$1,860,163.70 3,523,521,92 260,177.65 1,740,781.75 1,740,781.75 1,740,781.75 1,19,597.50 419,013.30 328,625.65 1,040,335.94
Improvements on leased railway property.  Deposits in lieu of mortgaged property sold:  Cash \$2,599,025.75  Less company's securities 1,688,600.00 910,425.75  Miscellaneous physical property.  Investments in Affiliated Companies:  Stocks  Bonds Notes Advances  Other Investments:  Stocks Bonds Advances Miscellaneous  Total Investments  Current Assets: Cash Special deposits Special deposits Loans and bills receivable. Traffic and car-service balances receivable. Net balance receivable from agents and conductors. Miscellaneous accounts receivable. Interest and dividends receivable. Interest and dividends receivable.	\$23,699.15 12,404,466.25 \$370,761,001.02 \$46,016,579.18 12,327,302.06 2,000,000.00 6,505,648.83 \$66,849,530.07 \$5,343,344.05 5,771,584.10 491,883.43 278,981.41 \$11,885,792.99 \$449,496,324.08 \$2,250,367.31 41,440.35 64,687.96 1,028,849.23 808,642.42 1,871,861.66 5,781,500.04 326,112.69	Second preferred Common	\$28,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00 \$112,202,433.77 24,295,000.00 3,719,000.00 589,400.00 \$140,805,833.77 ction llances payable lared llared llated llated llated llated	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00 \$12,261,900.00 1,637,000.00 \$13,898,900.00	41,970,650.00 69,989,100.00 \$139,950,950.00 \$99,940,533.77 22,658,000.00 3,719,000.00 589,400.00 \$126,906,933.77 \$1,894,138.38 \$1,860,137.65 1,740,781.7 1,19,597.50 4,90,133.00 328,625.65 1,040,335.94 \$10,299,040.15 \$177,071.35
Improvements on leased railway property.  Deposits in lieu of mortgaged property sold: Cash \$2,599,025.75  Less company's securities 1,688,600.00 910,425.75  Miscellaneous physical property.  Investments in Affiliated Companies: Stocks Bonds Notes Advances  Other Investments: Stocks Bonds Advances Miscellaneous  Total Investments  Current Assets: Cash Special deposits Loans and bills receivable Traffic and car-service balances receivable. Net balance receivable from agents and conductors. Miscellaneous accounts receivable Material and supplies. Interest and dividends receivable Other current assets.	\$23,699.15 12,404,466.25 \$370,761,001.02 \$46,016,579.18 12,327,302.06 2,000,000.00 6,505,648.83 \$66,849,530.07 \$5,343,344.05 5,771,584.10 491,883.43 278,981.41 \$11,885,792.99 \$449,496,324.08 \$2,250,367.31 41,440.35 64,687.96 1,028,849.23 808,642.42 1,871,861.66 5,781,500.04 326,112.69 10,932.26	Second preferred Common	\$28,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00 \$112,202,433.77 24,295,000.00 3,719,000.00 \$8140,805,833.77 ction llances payable lances payable	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00 \$12,261,900.00 1,637,000.00 \$13,898,900.00	41,970,650.00 69,989,100.00 \$139,950,950.00 \$99,940,533.77 22,658,000.00 3,719,000.00 589,400.00 \$126,906,933.77 \$1,894,138.38 \$1,860,163.77 260,177.65 1,740,781.75 6,822.74 1,19,597.50 419,013.30 328,625.65 1,040,335.94 \$10,299,040.15 \$177,071.35 \$4,508,341.19 1,063,961.79 11,359,656.34
Improvements on leased railway property.  Deposits in lieu of mortgaged property sold: Cash	923,699.15 12,404,466.25 \$370,761,001.02 \$46,016,579.18 12,327,302.06 2,000,000.00 6,505,648.83 \$66,849,530.07 \$5,343,344.05 5,771,584.10 4,1883.43 278,981.41 \$11,885,792.99 \$449,496,324.08 \$2,250,367.31 41,440.35 64,687.96 1,028,849.23 808,642.42 1,871,861.66 5,781,500.04 326,112.69 10,932.26 \$12,184,393.92	Second preferred Common	\$28,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00 \$112,202,433.77 24,295,000.00 3,719,000.00 \$140,805,833.77 etion. d larces payable lared lared lared lities	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00 \$12,261,900.00 1,637,000.00 \$13,898,900.00	41,970,650.00 69,989,100.00 \$139,950,950.00 \$99,940,533.77 22,658,000.00 3,719,000.00 589,400.00 \$126,906,933.77 \$1,894,138.38 \$1,860,163.70 3,523,521,92 260,177.65 1,740,781.75 1,740,781
Improvements on leased railway property. Deposits in lieu of mortgaged property sold: Cash	923,699.15  12,404,466.25  \$370,761,001.02  \$46,016,579.18 12,327,302.06 2,000,000.00 6,505,648.83  \$66,849,530.07  \$5,343,344.05 5,771,584.10 491,883.43 278,981.41  \$11,885,792.99  \$449,496,324.08  \$2,250,367.31 41,440.35 64,687.96 1,028,849.23 808,642.42 1,871,861.66 5,781,500.04 326,112.69 10,932.26  \$12,184,393.92 \$41,676.20	Second preferred Common  Total Stock  Long-Term Debt: Funded debt secured by mortgage Funded debt secured by stock collateral Equipment trust obliga- tions  Miscellaneous equipment obligations  Total Long-Term Debt  Grants in aid of construc Current LiabiLities: Traffic and car-service ba Audited accounts and wa Miscellaneous accounts pa Interest matured unpaid Dividends matured unpaid Unmatured dividends dec Unmatured interest accru Unmatured interest accru Unmatured rents accrued Other current liabilities.  Total Current Liabi Deferred liabilities Unadjusted Credits: Tax liability Insurance and casualty Accrued depreciation—Ec	\$28,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00 \$112,202,433.77 24,295,000.00 3,719,000.00 589,400.00 \$140,805,833.77 ction. llances payable lared llared llared llared llared llared lities	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00 \$12,261,900.00 1,637,000.00 \$13,898,900.00	41,970,650.00 69,989,100.00 \$139,950,950.00 \$99,940,533.77 22,658,000.00 3,719,000.00 589,400.00 \$126,906,933.77 \$1,894,138.38 \$1,860,163.70 3,523,521.92 260,177.65 1,740,781.75 41,19,597.50 419,013.30 328,625.65 1,040,335.94 \$10,299,040.15 \$177,071.35 \$45,508,341.19 1,063,961.79 11,359,655.100.32
Improvements on leased railway property. Deposits in lieu of mortgaged property sold: Cash \$2,599,025.75  Less company's securities 1,688,600.00 910,425.75  Miscellaneous physical property.  Investments in Affiliated Companies: Stocks Bonds Notes Advances  Other Investments: Stocks Bonds Advances Miscellaneous  Total Investments  Current Assets: Cash Special deposits Loans and bills receivable. Traffic and car-service balances receivable. Miscellaneous accounts receivable. Miscellaneous are dividends receivable. Interest and dividends receivable Other current assets.  Total Current Assets Deffered Assets: Working fund advances Working fund advances \$1,076,571.66 Less company's securities \$1,076,571.66 Less company's securities \$1,076,571.66 Less company's securities \$1,076,571.66 A11,000.00	\$23,699.15 12,404,466.25 \$370,761,001.02 \$46,016,579.18 12,327,302.06 2,000,000.00 6,505,648.83 \$66,849,530.07 \$5,343,344.05 5,771,584.10 491,883.43 278,981.41 \$11,885,792.99 \$449,496,324.08 \$2,250,367.31 41,440.35 64,687.96 1,028,849.23 808,642.42 1,871,861.66 5,781,500.04 326,112.69 10,932.26 \$12,184,393.92 \$41,676.20 665,571.60	Second preferred Common	\$28,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00 \$142,002,433.77 24,295,000.00 3,719,000.00 \$140,805,833.77 ction	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00 \$12,261,900.00 1,637,000.00 \$13,898,900.00	41,970,650.00 69,989,100.00 \$139,950,950.00 \$99,940,533.77 22,658,000.00 3,719,000.00 589,400.00 \$126,906,933.77 \$1,894,138.38 \$1,860,167.07 3,523,521.92 260,177.65 1,740,781.75 1,740,781.75 1,740,781.75 1,19,597.50 419,013.30 328,625.65 1,040,335.94 \$10,299,040.15 \$177,071.35 \$45,083,341.19 1,063,961.79 11,359,656.34 66,255,100.32 452,778.64
Improvements on leased railway property.  Deposits in lieu of mortgaged property sold:  Cash \$2,599,025.75  Less company's securities 1,688,600.00 910,425.75  Miscellaneous physical property.  Investments in Affiliated Companies:  Stocks  Bonds  Notes  Advances  Other Investments:  Stocks  Bonds  Advances  Miscellaneous  Total Investments  Current Assets:  Cash \$Special deposits  Loans and bills receivable.  Traffic and car-service balances receivable.  Net balance receivable from agents and conductors.  Miscellaneous accounts receivable.  Interest and dividends receivable  Other current Assets  Deferred assets  Total Current Assets  Deferred Assets:  Working fund advances.  Insurance and other funds \$1,076,571.66  Less company's securities 411,000.00  Other deferred assets	\$23,699.15 12,404,466.25 \$370,761,001.02 \$46,016,579.18 12,327,302.06 2,000,000.00 6,505,648.83 \$66,849,530.07 \$5,771,584.10 491,883.43 278,981.41 \$11,885,792.99 \$449,496,324.08 \$2,250,367.31 41,440.35 64,687.96 1,028,849.23 808,642.42 1,871,861.66 5,781,500.04 326,112.69 10,932.26 \$12,184,393.92 \$41,676.20 665,571.60 220,989.15	Second preferred Common	\$28,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00 \$140,000,000.00 \$112,202,433.77 24,295,000.00 3,719,000.00 \$89,400.00 \$140,805,833.77 ction. llances payable lared llared	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00 \$12,261,900.00 1,637,000.00 \$13,898,900.00	41,970,650.00 69,989,100.00 \$139,950,950.00 \$99,940,533.77 22,658,000.00 3,719,000.00 589,400.00 \$126,906,933.77 \$1,894,138.38 \$1,860,163.70 3,523,521,92 260,177.65 1,740,781.75 6,822.74 1,119,597.50 419,013.30 328,625.65 1,040,335.94 \$10,299,040.15 \$177,071.35 \$4,508,34.11 1,063,961.79 11,359,656.34 66,255,100.32 452,778.64
Improvements on leased railway property.  Deposits in lieu of mortgaged property sold:  Cash \$2,599,025.75  Less company's securities 1,688,600.00 910,425.75  Miscellaneous physical property.  Investments in Affiliated Companies:  Stocks  Bonds  Notes  Advances  Other Investments:  Stocks  Bonds  Advances  Miscellaneous  Total Investments  Current Assets:  Cash  Special deposits  Loans and bills receivable  Traffic and car-service balances receivable.  Net balance receivable from agents and conductors.  Miscellaneous accounts receivable  Material and supplies.  Interest and dividends receivable  Other current assets.  Total Current Assets.  Defferred Assets:  Working fund advances  Insurance and other funds \$1,076,571.6i  Less company's securities 411,000.00  Other deferred assets.	\$23,699.15 12,404,466.25 \$370,761,001.02 \$46,016,579.18 12,327,302.06 2,000,000.00 6,505,648.83 \$66,849,530.07 \$5,343,344.05 5,771,584.10 491,883.43 278,981.41 \$11,885,792.99 \$449,496,324.08 \$2,250,367.31 41,440.35 64,687.96 1,028,849.23 808,642.42 1,871,861.66 5,781,500.04 326,112.69 10,932.26 \$12,184,393.92 \$41,676.20 665,571.60 220,989.15 \$928,236.95	Second preferred Common	\$28,000,000.00 42,000,000.00 42,000,000.00 42,000,000.00 \$140,000,000.00 \$112,202,433.77 24,295,000.00 3,719,000.00 \$89,400.00 \$140,805,833.77 ction llances payable llances payab	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00 \$12,261,900.00 1,637,000.00 \$13,898,900.00	41,970,650.00 69,989,100.00 \$139,950,950.00 \$99,940,533.77 22,658,000.00 3,719,000.00 589,400.00 \$126,906,933.77 \$1,894,138.38 \$1,860,163.70 3,523,521,9 2,260,177.65 1,740,781.75 1,740,781.75 1,740,781.75 1,740,781.75 1,740,781.75 1,740,781.75 1,740,781.75 1,740,781.75 1,740,781.75 1,740,781.75 1,740,781.75 1,740,781.75 1,740,781.75 1,759,50 419,013.30 \$28,625.65 1,040,335.94 \$10,299,040.15 \$177,071.35 \$4,508,341.19 1,063,961.79 11,359,656.34 6,6255,100.32 452,778.64 \$83,639,838.28
Improvements on leased railway property. Deposits in lieu of mortgaged property sold: Cash \$2,599,025.75  Less company's securities 1,688,600.00 910,425.75  Miscellaneous physical property.  Investments in Affiliated Companies: Stocks Bonds Notes Advances  Other Investments: Stocks Bonds Advances Miscellaneous  Total Investments  Current Assets: Cash Special deposits Loans and bills receivable Traffic and car-service balances receivable. Net balance receivable from agents and conductors. Miscellaneous accounts receivable Material and supplies. Interest and dividends receivable Other current assets.  Total Current Assets Deffered Assets Unadjusted Debits: Rents and injected Assets Unadjusted Debits: Rents and injected Assets. Unadjusted Debits: Rents and insurance premiums paid in advance.	\$23,699.15  12,404,466.25  \$370,761,001.02  \$46,016,579.18 12,327,302.06 2,000,000.00 6,505,648.83  \$66,849,530.07  \$5,343,344.05 5,771,584.10 491,883.43 278,981.41  \$11,885,792.99  \$449,496,324.08  \$2,250,367.31 41,440.35 64,687.96 1,028,849.23 808,642.42 1,871,861.66 5,781,500.04 326,112.69 10,932.26  \$12,184,393.92 \$41,676.20 665,571.60 220,989.15  \$928,236.95 \$29,615.69 363,679.34	Second preferred Common	\$28,000,000.00 42,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00 \$112,202,433.77 24,295,000.00 3,719,000.00 \$140,805,833.77 ction llances payable lared lared lities d lities cough income and urplus cough income and urplus ance	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00 \$12,261,900.00 1,637,000.00 \$13,898,900.00	41,970,650.00 69,989,100.00 \$139,950,950.00 \$99,940,533.77 22,658,000.00 3,719,000.00 589,400.00 \$126,906,933.77 \$1,894,138.38 \$1,860,163.70 3,523,521,92 260,177.65 1,740,781.75 1,740,781.75 41,91,597.50 419,013.30 328,625.65 1,040,335.94 \$10,299,040.15 \$177,071.35 \$4,508,341.19 1,063,961.79 11,359,656.032 452,778.64 \$83,639,838.28 \$97,312.293.84 1,738,000.00 \$99,050,293.84 1,561,776.21
Improvements on leased railway property.  Deposits in lieu of mortgaged property sold:  Cash \$2,599,025.75  Less company's securities 1,688,600.00 910,425.75  Miscellaneous physical property.  Investments in Affiliated Companies:  Stocks  Bonds  Notes  Advances  Other Investments:  Stocks  Bonds  Advances  Miscellaneous  Total Investments  Current Assets:  Cash  Special deposits  Loans and bills receivable  Traffic and car-service balances receivable.  Net balance receivable from agents and conductors.  Miscellaneous accounts receivable  Material and supplies.  Interest and dividends receivable  Other current assets.  Total Current Assets.  Defferred Assets:  Working fund advances  Insurance and other funds \$1,076,571.6i  Less company's securities 411,000.00  Other deferred assets.	923,699.15  12,404,466.25  \$370,761,001.02  \$46,016,579.18 12,327,302.06 2,000,000.00 6,505,648.83  \$66,849,530.07  \$5,343,344.05 5,771,584.10 491,883.43 278,981.41  \$11,885,792.99  \$449,496,324.08  \$2,250,367.31 41,440.35 64,687.96 1,028,849.23 808,642.42 1,871,861.66 5,781,500.04 326,112.69 10,932.26  \$12,184,393.92 \$41,676.20 665,571.60 220,989.15  \$928,236.95 \$29,615.69 363,679.34 477,792.00	Second preferred Common	\$28,000,000.00 42,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00 \$112,202,433.77 24,295,000.00 3,719,000.00 \$189,400.00 \$140,805,833.77 ction llances payable lared lared lities d lities cough income and arplus cough income and arplus ance crplus	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00 \$12,261,900.00 1,637,000.00 \$13,898,900.00 d surplus	41,970,650.00 69,989,100.00 \$139,950,950.00 \$99,940,533.77 22,658,000.00 3,719,000.00 589,400.00 \$126,906,933.77 \$1,894,138.38 \$1,860,163.70 3,523,521,92 260,177.65 1,740,781.75 1,740,781.75 41,91,597.50 419,013.30 328,625.65 1,040,335.94 \$10,299,040.15 \$177,071.35 \$4,508,341.19 1,063,961.79 11,359,656.032 452,778.64 \$83,639,838.28 \$97,312.293.84 1,738,000.00 \$99.050,293.84 1,561,776.21 \$100,612,070.05
Improvements on leased railway property. Deposits in lieu of mortgaged property sold: Cash	923,699.15  12,404,466.25  \$370,761,001.02  \$46,016,579.18 12,327,302.06 2,000,000.00 6,505,648.83  \$66,849,530.07  \$5,343,344.05 5,771,584.10 491,883.43 278,981.41  \$11,885,792.99  \$449,496,324.08  \$2,250,367.31 41,440.35 64,687.96 1,028,849.23 808,642.42 1,871,861.66 5,781,500.04 326,112.69 10,932.26  \$12,184,393.92 \$41,676.20 665,571.60 220,989.15  \$928,236.95 \$29,615.69 363,679.34 477,792.00 \$871,087.03	Second preferred Common	\$28,000,000.00 42,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00 \$140,000,000.00 \$140,000,000.00 \$140,000,000.00 \$140,000,000.00 \$140,000,000.00 \$140,000,000.00 \$140,805,833.77 ction. llances payable llances pay	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00 \$12,261,900.00 1,637,000.00 \$13,898,900.00	41,970,650.00 69,989,100.00 \$139,950,950.00 \$99,940,533.77 22,658,000.00 3,719,000.00 589,400.00 \$126,906,933.77 \$1,894,138.38 \$1,860,163.77 260,177.65 1,740,781.75 419,101.33 328,625.65 1,040,335.94 \$10,299,040.15 \$177,071.35 \$4,508,341.19 1,063,961.79 11,359,656.34 66,255,100.32 452,778.64 \$83,639,838.28 \$97,312,293.84 1,738,000.00 \$99,050,293.84 1,738,000.00 \$99,050,293.84 1,561,776.21 \$100,612,070.05 \$463,480,041.98
Improvements on leased railway property. Deposits in lieu of mortgaged property sold: Cash	923,699.15  12,404,466.25  \$370,761,001.02  \$46,016,579.18 12,327,302.06 2,000,000.00 6,505,648.83 \$66,849,530.07  \$5,343,344.05 5,771,584.10 491,883.43 278,981.41  \$11,885,792.99  \$449,496,324.08 \$2,250,367.31 41,440.35 64,687.96 1,028,849.23 808,642.42 1,871,861.66 5,781,500.04 326,112.69 10,932.26  \$12,184,393.92 \$41,676.20 665,571.60 220,989.15 \$928,236.95 \$29,615.69 363,679.34 477,792.00 \$871,087.03	Second preferred Common	\$28,000,000.00 42,000,000.00 42,000,000.00 70,000,000.00 \$140,000,000.00 \$140,000,000.00 \$140,000,000.00 \$140,000,000.00 \$140,000,000.00 \$140,000,000.00 \$140,000,000.00 \$140,805,833.77 ction. llances payable llances pay	Company \$8,800.00 29,350.00 10,900.00 \$49,050.00 \$12,261,900.00 1,637,000.00 \$13,898,900.00 d surplus	41,970,650.00 69,989,100.00 \$139,950,950.00 \$99,940,533.77 22,658,000.00 3,719,000.00 589,400.00 \$126,906,933.77 \$1,894,138.38 \$1,860,163.77 260,177.65 1,740,781.75 419,101.33 328,625.65 1,040,335.94 \$10,299,040.15 \$177,071.35 \$4,508,341.19 1,063,961.79 11,359,656.34 66,255,100.32 452,778.64 \$83,639,838.28 \$97,312,293.84 1,738,000.00 \$99,050,293.84 1,738,000.00 \$99,050,293.84 1,561,776.21 \$100,612,070.05 \$463,480,041.98



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# 1937 Railroad Chart (with 1938 Supplement)

By ROBERT A. BURROWS

Statistician

SHOWS inter-relation, consolidation and capitalization of the 53 principal railroads, as of November 1, 1937. The principal companies are divided into 21 groups, including the two Canadian systems.

This chart shows the inter-relations of all voting stocks for Class I steam railroads and all important "top" and "intermediate" holding and investment companies. Coded symbols show the per cent holdings of all common and preferred stocks. Outstanding capitalization, per cent classification of gross revenues, gross revenues, operating ratio, net income, share earnings and over-all charges earned are shown. Also flow of dividends, capitalization ratio, stock symbols, receiverships, tabulation of 1937 earnings and dividend payments, miles of road operated, government loans, and leases.

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